

The Challenge of Climate Change: Poor Farmers at Risk









OUR MISSION

TO CONTRIBUTE TO FOOD SECURITY AND POVERTY ERADICATION IN DEVELOPING COUNTRIES THROUGH RESEARCH, PARTNERSHIPS, CAPACITY BUILDING, AND POLICY SUPPORT, PROMOTING SUSTAINABLE AGRICULTURAL DEVELOPMENT BASED ON THE ENVIRONMENTALLY SOUND MANAGEMENT OF NATURAL RESOURCES.



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CGIAR at a Glance 2

Message from Ian Johnson, CGIAR Chairman 4

Overview from Francisco J. B. Reifschneider, CGIAR Director 6

Perspectives on Agriculture and Climate Change

by Robert T. Watson, Chairman, Intergovernmental Panel on Climate Change

Selected Snapshots of the Potential Effects of Climate Change

Projected Changes in Annual Precipitation for the 2050s 11

Crop Yield Change 12

Projected Changes in Annual Temperatures for the 2050s 13

People at Risk from a 44 cm Sea-Level Rise by the 2080s 14

Agricultural Research and Climate Change: Why CGIAR Science Is Relevant to the Needs of Small Farmers

by Pedro A. Sanchez, Chairman, Inter-Center Working Group on Climate Change

About the CGIAR-Supported Future Harvest Centers 18

Financial Report 2000 23

Overview: Twenty-Nine Years of CGIAR Investment 27

Who's Who in the CGIAR 99





CGIAR at a Glance

THE CGIAR FAMILY

Created in 1971, the Consultative Group on International Agricultural Research (CGIAR) is an association of public and private members supporting a system of 16 international agricultural Centers that work in more than 100 countries to mobilize cutting-edge science to reduce hunger and poverty, improve human nutrition and health, and protect the environment.

While agriculture is the cornerstone of development in poor countries, where more than 70 percent of people depend on the land for their livelihood, agricultural growth must be achieved through methods that preserve the productivity of natural resources. Research is one key means by which the world's knowledge of agriculture is increased and improved.

The CGIAR's research agenda focuses on both strategic and applied research. This agenda includes the entire range of problems affecting agricultural productivity and links these problems to broader concerns about poverty reduction, sustainable management of natural resources, protection of biodiversity, and rural development.

More than 8,500 CGIAR scientists and scientific staff conduct research to improve the productivity of tropical agriculture. This research focuses on higher-yielding food crops and more productive livestock, fish, and trees; improved farming systems that are environmentally benign; better policies; and enhanced scientific capacities in developing countries. The knowledge generated by CGIAR—and the public and private organizations that work with the CGIAR as partners, research associates, and advisors—pays handsome dividends for poor farmers in terms of increased output, greater incomes, and sounder utilization of resources. All benefits of CGIAR research are kept within the public domain, freely available to everyone. These benefits range from developing crops suited to local conditions, to better farming systems that reduce agriculture's impact on natural resources, to tackling some of the larger global challenges, such as climate change.

Advocating science-based approaches to solving some of the world's most pressing developmental problems is at the heart of the CGIAR's mission. The CGIAR supports international development goals, including those laid out in the Convention to Combat Desertification, the Convention on Biological Diversity, the International Undertaking on Plant Genetic Resources, and the United Nations Framework Convention on Climate Change.

CGIAR scientists have received numerous awards for their contributions to meeting the world's enormous food needs. Most recently, Dr. Evangelina Villegas and Dr. Surinder K. Vasal received the Millennium World Food Prize for their lifetime work to develop a higher-yielding, protein-rich "miracle corn" that can help prevent malnutrition in millions of people. Dr. Villegas is the first woman ever to receive the prize.

Over the 30 years of its existence, the CGIAR has made a major contribution to poverty reduction and food security in developing countries, and has achieved outstanding rates of return on investment. For example:

- Real prices of major food staples consumed by the poor have dropped significantly-43 percent for maize, 38 percent for wheat, and 33 percent for rice—thereby helping to reduce poverty in rural and urban areas.
- The value of wheat production in the developing world has increased by more than US\$1.8 billion a year. In Latin America, 90 percent of irrigated rice production is traceable to CGIAR varieties.
- Pesticide use in developing countries has been reduced substantially through integrated pest management and biological control methods developed by CGIAR and national collaborators. Control of cassava pests has added over US\$400 million to annual output in Sub-Saharan Africa.

CGIAR MEMBERS

The CGIAR partnership includes 22 developing and 21 industrialized countries, 3 private foundations, and 12 regional and international organizations that provide financing, technical support, and strategic direction. The Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP), and the World Bank serve as cosponsors.

CGIAR Members are expected to contribute US\$340 million to the CGIAR's 2001 research budget, an increase of more than 40 percent since the early 1990s. Individual Members make voluntary contributions to the Centers and programs of their choice, allowing funds to be targeted to areas of research and regions that align with development priorities. Independent studies consistently demonstrate that CGIAR research earns handsome returns.

2

CGIAR MEMBERS COOPERATING INSTITUTIONS

INDUSTRIALIZED COUNTRIES

Australia Australian Centre for International

Agricultural Research Federal Ministry of Finance

Austria Federal Ministry of Finance Belgium Ministry of Foreign Affairs

Canada Canadian International Development Agency

Denmark Ministry of Foreign Affairs
Finland Ministry for Foreign Affairs
France Ministry of Foreign Affairs

Germany Federal Ministry of Economic Cooperation and

Development

Ireland Department of Foreign Affairs
Italy Ministry of Foreign Affairs
Japan Ministry of Foreign Affairs
Luxembourg Ministry of Finance
Netherlands Ministry of Foreign Affairs

New Zealand Ministry of Foreign Affairs and Trade

Norway Ministry of Foreign Affairs
Portugal Ministry of Finance
Spain Ministry of Agriculture
Sweden Ministry of Foreign Affairs
Switzerland Swiss Development Cooperation

United Kingdom Department for International Development
United States of United States Agency for International

America Development

DEVELOPING AND TRANSITION COUNTRIES

Bangladesh Ministry of Agriculture

Brazil Ministry of Agriculture and Food Supply

China Ministry of Agriculture

Colombia Ministry of Agriculture and Rural

Development

Côte d'Ivoire Ministry of Agriculture and Animal Resources Egypt, Arab Ministry of Agriculture and Land Reclamation

Republic of

India Ministry of Agriculture

Indonesia Ministry of Agriculture and Forestry

Iran, Islamic Ministry of Agriculture

Republic of

Kenya Ministry of Agriculture and Rural

Development

Korea, Republic of Ministry of Agriculture Mexico Ministry of Agriculture

Nigeria Ministry of Agriculture and Natural Resources
Pakistan Ministry of Food, Agriculture and Livestock

Peru Ministry of Agriculture
Philippines Department of Agriculture
Romania Ministry of Agriculture and Food

Russian Federation Russian Academy of Agricultural Sciences
South Africa Ministry of Agriculture and Land Affairs
Syrian Arab Ministry of Agriculture and Agricultural

Republic Reform

Thailand Department of Agriculture

Uganda National Agricultural Research Organization

CGIAR MEMBERS

FOUNDATIONS
Ford Foundation
Kellogg Foundation
Rockefeller Foundation

INTERNATIONAL AND REGIONAL ORGANIZATIONS

Asian Development Bank African Development Bank

Arab Fund for Economic and Social Development

European Commission

Food and Agriculture Organization of the United Nations

Inter-American Development Bank

International Development Research Centre
International Fund for Agricultural Development
OPEC Fund for International Development
United Nations Development Programme
United Nations Environment Programme

World Bank

CGIAR-SUPPORTED FUTURE HARVEST

CENTERS

The 16 Centers supported by the CGIAR are autonomous institutions, each with its own charter, international board of trustees, director, and staff. Three years ago, the Centers created Future Harvest, an organization dedicated to building support for international agricultural research, and subsequently decided to call themselves the "Future Harvest" Centers. These Centers are:

CIAT Centro Internacional de Agricultura Tropical (Colombia)
CIFOR Center for International Forestry Research (Indonesia)
CIMMYT Centro Internacional de Mejoramiento de Maïz y Trigo
(Mexico)

CIP Centro Internacional de la Papa (Peru)

ICARDA International Center for Agricultural Research in the Dry Areas (Syrian Arab Republic)

ICLARM International Center for Living Aquatic Resources Management (Malaysia)

ICRAF International Centre for Research in Agroforestry (Kenya)

ICRISAT International Crops Research Institute for the Semi-Arid Tropics (India)

IFPRI International Food Policy Research Institute

(United States)

IITA International Institute of Tropical Agriculture (Nigeria)
ILRI International Livestock Research Institute (Kenya)
IPGRI International Plant Genetic Resources Institute (Italy)
IRRI International Rice Research Institute (Philippines)
ISNAR International Service for National Agricultural Research

(Netherlands)

IWMI International Water Management Institute (Sri Lanka)
WARDA West Africa Rice Development Association (Côte d'Ivoire)

Message from Ian Johnson, CGIAR Chairman

feel very privileged to serve as the eighth Chairman of the CGIAR. Since my appointment in July 2000, I have used every opportunity to get to know the CGIAR better, visiting the Centers, consulting with the Cosponsors and Members, talking to farmers in the field, and seeing CGIAR scientists in action. This CGIAR Annual Report



2000 reflects the high quality of science practiced throughout the CGIAR System over the past year.

The CGIAR started as a unique effort to mobilize agricultural research on the frontlines of the battles against hunger, poverty, and environmental degradation. Today, new challenges are being added to the development agenda—threats to the global environment, particularly climate change; the management of natural resources, such as land and water; and public health and nutritional concerns, to name a few. In this past year, we have seen growing evidence of the potential impact of these threats on agriculture, and, by definition, on the CGIAR's research agenda.

Major transformations will occur as we seek to fulfill our vision of a world in which the CGIAR ensures that international agricultural research contributes, to the fullest possible extent, to poverty reduction and sustainable development.

In this year of change the CGIAR will be forward-looking and more innovative, mobilizing a critical mass of scientific expertise, and using cutting-edge science in efforts to resolve "big picture" issues that confront the development community. We will expand alliances and reinforce partnerships to enhance the overall impact.

A strong sentiment for change emerged at last year's International Centers Week (ICW2000), when it was generally agreed that internal changes would be needed if the CGIAR were to be appropriately structured and adequately equipped to grapple with the problems of today and tomorrow.

There was broad agreement that the CGIAR must be relaunched, that it must be clearly seen to be changing in both form and function, with the existing strengths and experience of the System serving as the foundation on which a restyled CGIAR could be built. A Change Design and Management Team (CDMT), reporting to a Steering Group of representative CGIAR stakeholders, was created to maintain the momentum of change. The CDMT's proposals can provide a basis for CGIAR transformation.

FORMIDABLE CHALLENGES

As a scientific enterprise, the CGIAR has embraced change before. New research avenues have been explored, new Centers added, new Members welcomed—especially from the developing countries. It is a truism that a vibrant scientific effort thrives on change. The ongoing revolution in the biological sciences, computing technology, and near instantaneous global communications offers tremendous opportunities for new partnerships to help the poor. The CGIAR must seize these opportunities to advance its mandate. The year 2000 was one of review and preparation. In 2001, it is time

Thirty years ago, international interest in harnessing agricultural science and technology to combat famine and promote agricultural development was at an unprecedented high. The effectiveness of this strategy is widely acknowledged, as these examples show:

- More than 300 CGIAR-developed varieties of wheat and rice, and more than 200 varieties of maize, are being grown by farmers in developing countries.
- CGIAR holds in public trust, under oversight of the Food and Agriculture Organization of the United Nations (FAO), the world's largest collection of plant genetic resources (comprising over 600,000 accessions of more than 3,000 crop, forage, and pasture species).
- CGIAR works with developing countries in strengthening national agricultural research capacities. More than 75,000 scientists and technical personnel have already received training at the Centers.

Despite the progress made, however, new challenges remain. One-fifth of the world's population lives in absolute poverty, on less than US\$1 a day, and almost half the world's population lives on less than US\$2 a day. Some 826 million people do not have enough to eat. In addition, numerous other challenges lie heavily on the development agenda. They include the "hidden hunger" of malnutrition, water scarcity, land degradation, loss of biodiversity, human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS), and other pressures. These challenges will grow more complex as the world's population increases

by an estimated 2 billion people—most of them in developing countries—over the next 25 years.

The challenge to agriculture inherent in these developments is formidable. Agriculture alone cannot solve all development problems, but agriculture and its sustaining force, agricultural research, are essential elements of any realistic effort to resolve the major development issues that lie at the heart of sustainable development—including food security, nutritional deficiency, climate change, and water and land management.

THEMES FOR CHANGE

Several themes are expected to underpin change in the CGIAR.

First, challenge-oriented research: The impact of CGIAR research could be substantially elevated if the current research agenda were augmented by a strategic approach in which the Centers and their partners collaborate to achieve verifiable, targeted outputs in clearly defined strategic research areas. Such a strategic research agenda, defined in consultation with other stakeholders, could mobilize agricultural science to respond to major challenges that are at the heart of global development concerns. Each program would consist of building blocks of projects that together respond to a major development challenge—for instance, the looming water crisis and its impact on smallholder agriculture.

Second, operational strength: The Centers will be strengthened by expanding present strategic alliances, both among themselves and with non-CGIAR institutions. National agricultural research systems (NARS) must continue to be the cornerstone of any framework of partnerships and alliances. Civil society institutions, the private sector, and university research institutes will also be more widely engaged. The common needs of the Centers are currently met through ad hoc arrangements, or not met at all. A common services unit could increase cohesion and improve efficiency.

Third, nimble decisionmaking and governance: The CGIAR embodies elements of a new age of international institutions. Critical elements of such institutions are streamlined decisionmaking; deliberations in a "virtual" mode wherever possible; minimum use of large meetings, committees, and so on; and the ability to mobilize, disseminate, and use knowledge to shape policy, technical, and scientific agendas. Knowledge-based institutions are going to be the winners in the new age, and the CGIAR, a knowledge-based institution, must exploit its inherent and potential strengths.

Fourth, stable long-term finance: To be effective, the CGIAR needs a strategy—based on effectiveness, accountability, and output—for stable and replenishable financing. One implication of the challenge-based research agenda is that, over time, funding for the CGIAR would be more programmatic than institutional. This could stabilize funding through multiyear arrangements. The possibility of attracting support from nontraditional donors, including donors from the private sector, is also being explored.

THE SPECIAL IMPACT OF CLIMATE CHANGE ON THE CGIAR RESEARCH

The theme of this annual report, *The Challenge of Climate Change: Poor Farmers at Risk*, is fundamental to the CGIAR's goal of addressing the needs of small farmers in developing countries through agricultural research. Mobilizing science, developing adaptation and mitigation strategies, and targeting the ecosystems most vulnerable to climate variability will remain the primary objectives of CGIAR efforts, both now and in the future.

The most recent assessment of climate change by the world's leading scientists (assembled in the Intergovernmental Panel on Climate Change of the United Nations) concludes that the earth's average surface temperature could increase by as much as 5.8 degrees Celsius (10.4 degrees Fahrenheit) by the end of the current century. This is significantly higher than earlier estimates.

How should we respond? The CGIAR is concerned with the reality that agriculture accounts for a significant portion of the total emissions of greenhouse gases. We need to conduct research to develop technologies that not only help to reduce poverty and promote the sustainable use of natural resources, but that also mitigate the impact of agriculture on climate. This is a particular challenge to developing countries as they confront climate change and may not have the scientific and institutional capacities to undertake the required research.

So what does all this mean to the small farmer, the primary client of the CGIAR? A warming world will surely impact yields of staple crops, increase the incidence of pest attacks, and exacerbate drought, all with profound effects on the well-being of small farmers in developing countries. The CGIAR and its partners remain committed to addressing these issues by mobilizing the best of science for poor farmers at risk.

Overview from Francisco J. B. Reifschneider, CGIAR Director



t the dawn of the new millennium, agricultural development holds the key to some of the most pressing challenges facing the human family. The CGIAR has a long track record of success in providing research outputs that fulfill the criteria for global public goods. At a time when one of the greatest

challenges is the speed of scientific change itself, the CGIAR must remain true to its mission of generating knowledge and technologies that directly benefit poor farmers in developing countries.

For the CGIAR, the year 2000 will be remembered as a time when the contributions of CGIAR science to international development goals, including poverty reduction and improved health and nutrition, were widely recognized.

Let me highlight just three examples:

- A higher-yielding, protein-rich "miracle corn" to help prevent malnutrition in millions of people earned Dr. Evangelina Villegas and Dr. Surinder K. Vasal of the Centro Internacional de Mejoramiento de Maïz y Trigo (International Maize and Wheat Improvement Center—CIMMYT) the Millennium World Food Prize. Dr. Villegas-the first woman ever to receive the Food Prize—and Dr. Vasal join six other CGIAR scientists who are World Food Prize Laureates.
- Scientists at the International Rice Research Institute (IRRI) were enlisted to aid international efforts to investigate the safety and utility of "Golden Rice" in combating Vitamin A deficiency, which is responsible for 500,000 cases of irreversible blindness and 1 to 2 million deaths worldwide each year. This work is a good example of CGIAR strengths in mobilizing high science for the cause of the poor.
- Scientists at the International Livestock Research Institute (ILRI) and The Institute for Genomic Research

(TIGR) began using advanced sequencing techniques from the Human Genomic Project to pry open the molecular secrets of *Theileria parva*, the tiny parasite that causes East Coast Fever, a debilitating livestock disease that kills two cows every minute in Sub-Saharan Africa. Their research may also lead to a breakthrough in finding cures for persistent human diseases such as malaria and cancer.

The year 2000 will also be remembered for the changes that occurred across the CGIAR System. World Bank Vice President Ian Johnson became the CGIAR Chairman in July, succeeding Ismail Serageldin, who had served in that leadership position since 1994. Alexander von der Osten, CGIAR Executive Secretary since 1989, also retired at the end of the year

Since becoming CGIAR Director in January 2001, I have had the pleasure of working with the whole CGIAR family. It is my privilege to participate in shaping the new, revitalized CGIAR.

Scientific enterprise works best as a collaboration, especially when new challenges confront us and test the relevance of our work. In order for the CGIAR to be on the cutting edge, it must renew and transform itself continuously. Members of the CGIAR family are in broad agreement that such renewal is necessary: together, they supported formation of a Change Design and Management Team to examine options, suggest alternatives, and propose specific changes, all the while ensuring that the target of our efforts remains the small farmer who ekes out a precarious existence in the marginal ecosystems of the developing world.

This annual report itself reflects change. It highlights a major environmental issue, the potential impact of climate change on agriculture, especially in developing countries. International agricultural research will play an important role in helping poor farmers adapt to the consequences of climate change and mitigate its deleterious effects. Although climate change is global in scope, a group of the world's leading scientists has warned that climate change is potentially most devastating to the world's poorest people. The CGIAR's research agenda cannot remain unaffected by that finding.

It is a reality that we are in the midst of change that affects every aspect of our work. For a scientific enterprise such as the CGIAR, the prospect of change cannot deter us from pursuing our mission of promoting poverty reduction and sustainable agriculture. Indeed, this is an opportunity for the scientific temperament to take charge of change and direct it to the noble cause of helping the world's poor farmers.

At this time of change, the raison d'être for the CGIAR remains unchanged. Our strategy builds on past achievements, and recognizes that the problems of today and tomorrow need a different kind of security, one that includes food, natural resources, and social components. In pursuit of its pro-farmer mission, the "new" CGIAR must strengthen its true and creative partnerships—based on mutual respect and interests—with national agricultural research systems, civil society institutions, and the private sector, among others.

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Perspectives on Agriculture and Climate Change

he last two decades have been the warmest in the past 100 years. Sea levels are rising, rainfall patterns are changing, Arctic ice is thinning, and the frequency and intensity of El Niño events appear to be increasing. In many parts of the world, major heatwaves, floods, droughts, and extreme weather patterns have led to significant loss of life. Associated economic losses totaled US\$40 billion in 1999; one-fourth of the losses occurred in developing countries. The question is no longer whether the earth's climate will change, but rather how much it will change, how fast, and where.

The Intergovernmental Panel on Climate Change (IPCC) has warned that the latest scientific evidence points strongly toward a steadily warming world in the twenty-first century. An overwhelming majority of scientific experts around the world, while recognizing that some scientific uncertainties exist, nonetheless believe that climate change caused by human activities (primarily burning of fossil fuels, deforestation, and agricultural practices) is already occurring, and that further climate change is inevitable.

For developing countries in particular the incremental costs of adapting to a continuously changing climate would be a major burden, even assuming that they possess the institutional and technical capability to adapt. The good news is that significant reductions in net emissions of man-made greenhouse gases are technically feasible. When they are released into the atmosphere, carbon dioxide, methane, and nitrous oxide are the primary contributors to the greenhouse effect. The bulk of their emissions, particularly that of carbon dioxide, is related to energy processes. Historically, industrialized nations are responsible for almost three-fourths of carbon dioxide emissions worldwide.

The IPCC was established by the United Nations in 1988 to provide governments with a scientific consensus on climate change and its consequences; recently the IPCC completed the most comprehensive review and update of the state of climate change since its Second Assessment Report, Climate Change 1995. According to the panel's new assessment report, the earth's average surface temperature could rise by as much as 5.8 degrees Celsius (10.4 degrees Fahrenheit) over the next 100 years. This warming, the most rapid climate change in 10,000 years, would be more than 60 percent higher than that predicted by scientists just five years ago.



BY ROBERT T. WATSON, CHAIRMAN INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

The panel concluded that "there is stronger evidence" of humanity's influence on climate and that man-made greenhouse gases have probably already "contributed most of the observed warming over the last 50 years." Unless concentrations of greenhouse gases are stabilized, the probable rise in their concentrations in the atmosphere could mean:

- Severe water stress in the arid and semiarid land areas in southern Africa, the Middle East, and southern Europe
- Decreased agricultural production in many tropical and subtropical countries, especially countries in Africa and Latin America, as a result of almost any increases in temperature
- Higher worldwide food prices as supplies fail to keep up with the demand of an increasing population
- Increased vector-borne diseases, such as malaria, in tropical countries
- Major changes in the productivity and composition of critical ecological systems, particularly coral reefs and forests
- Tens of millions of people at risk from flooding and landslides, driven by projected increases in rainfall intensity and, in coastal areas, rising sea levels.

The magnitude of the climate change phenomenon must be understood in the context of global environmental degradation and threats to sustainable development. World leaders today face enormous challenges to:

■ Reduce poverty for the 1.3 billion people who live on less than US\$1 per day and the 3 billion who live on less than US\$2 per day









- Provide adequate food, especially for the nearly 800 million people who are malnourished today, by doubling food production in the next 35 years
- Provide clean water for the 1.3 billion people who do not have clean drinking water, and provide sanitation for the 2 billion people who lack access to sanitation
- Provide electrification for the 2 billion people who lack electricity
- Provide a healthy environment for the more than 1 billion people who are exposed to dangerous levels of indoor and outdoor air pollution.

Predictions that climate change will mean severe flooding of coastal areas, an increase in storms and heavy rains in some regions, and more rapid desertification in others have enormous implications for agricultural productivity, water resources, and natural ecosystems.

EFFECTS OF CLIMATE CHANGE ON CROPS

Crop yields and changes in productivity as a result of climate change will vary considerably across regions and among localities, thus changing production patterns. While an increase of less than 2 degrees Celsius in the average global temperature in the next 100 years would bring some benefits to the technically advanced countries with temperate climates in the form of milder winters, extended growing seasons, and higher yields of some crops, the ability to deal with warming depends heavily on economic resources and access to technology. In developing countries, even a modest warming will mean net losses. In the tropics and subtropics, where some crops are near their maximum temperature tolerance,

and where dryland, nonirrigated agriculture dominates, yields are likely to decrease with even small increases in atmospheric temperature. Overall agricultural productivity in Africa and Latin America could decrease during the next century, leading to hunger and malnutrition in vulnerable areas, especially in drought-prone regions of Africa.

EFFECTS OF CLIMATE CHANGE ON WATER

Climate change will increase flooding in some regions, but will further exacerbate the frequency and magnitude of droughts in central Asia, northern and southern Africa, the Middle East, the Mediterranean region, and Australia. More frequent and longer droughts will have a potentially adverse effect on agriculture, particularly in developing countries located in arid and semiarid areas. Moreover, changing patterns of rainfall and runoff, coupled with population growth, will lead to huge pressures on water supplies. At present, 1.7 billion people live in areas where water resources are scarce. This number is expected to increase to about 5.4 billion over the next 25 years. At the same time, unfortunately, in many regions of the world a significant amount of water is wasted, largely through inefficient water management practices, including irrigation.

EFFECTS OF CLIMATE CHANGE ON BIODIVERSITY

Natural ecosystems will suffer from climate change. The structure, composition, and geographic distributions of many ecosystems will shift as individual species respond to changes in climate, resulting in loss of habitat and species. Forests, especially boreal systems, are vulnerable to projected

changes in climate. Those changes will affect the composition and geographic range of forests, as well as their health and productivity. Increased temperatures threaten coral reefs—the biologically diverse marine ecosystems on which fisheries, coastal protection, and erosion control depend.

CLIMATE CHANGE AND AGRICULTURE: WHAT CAN BE DONE?

Carbon dioxide is the leading heat-trapping greenhouse gas. Human activities result in some 7 billion tons of carbon in the form of carbon dioxide annually, with fossil fuel use the largest single source. Since the Industrial Revolution, carbon dioxide concentrations have increased by about 30 percent, primarily due to the burning of coal, oil, and natural gas for industry, electricity-generation, and transportation, and, to a lesser extent, the oxidation of biomass and decomposition of soil organic matter from conversion of forests to agriculture.

Agriculture's role in climate change is just starting to be recognized. Clearing trees for fields and pastures, transforming soil into cultivated land, flooding areas for rice and sugarcane production, burning crop residues, raising ruminant animals, and using nitrogen fertilizers all release greenhouse gases into the atmosphere. Global agriculture is now estimated to account for about 20 percent of total anthropogenic emissions of greenhouse gases.

Thus, agriculture plays a significant role in climate change. Cost-effective reductions in greenhouse gases can be achieved by:

- Better managing agricultural soils, rangelands, and forests
- Improving the efficiency of fertilizer use
- Restoring degraded agricultural lands and rangelands
- Improving ruminants' digestion through better feed
- Improving rice farming to reduce the amount of methane escaping into the atmosphere
- Slowing deforestation by reducing slash-and-burn agriculture and establishing appropriate tree plantations.

In Climate Change and the Global Harvest: Potential Impacts of the Greenhouse Effect on Agriculture, scientists Cynthia Rosenzweig and Daniel Hillel conclude:

"While environmental policy for agriculture has traditionally been tied to water quality and soil conservation, these policies may be expanded to limit emissions of greenhouse gases—especially carbon dioxide, methane, and nitrous oxide-from agricultural activities. Further, policies aimed at encouraging carbon sequestration through agroforestry may become important for the industry."

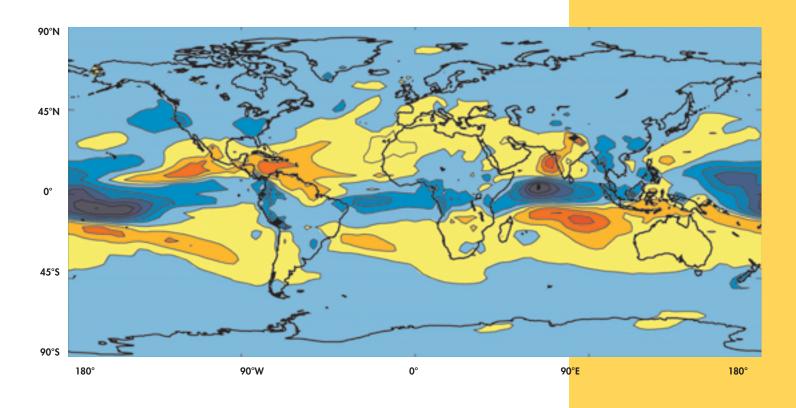
Forest and agricultural soils are potential repositories of carbon and could hold down concentrations of carbon dioxide in the atmosphere. Their potential for trapping additional carbon each year is high if farmers adopt improved management practices, including agroforestry. According to IPCC estimates, the potential for carbon sequestration in tropical ecosystems by the year 2010 is 125 megatons of carbon a year for croplands, 170 megatons for forests, and 240 megatons for grazing lands.

As an international research organization with a global network of research centers and partnerships, the CGIAR is ideally positioned to provide the research backbone, technical advice, and capacity building on the implications of land use, land-use change, and forestry management on climate change—and for biodiversity and land degradation in developing countries, as well. CGIAR scientists have already made a tremendous contribution in their role as architects of the Green Revolution that greatly increased food production and helped "save" 426 million hectares (nearly 1 billion acres of land) from use as farmland.

A new global challenge program that couples advances in agricultural science with research to mitigate climate change and adapt agriculture to its anticipated effects could have profound effects on the global environment. That research could focus on development of rice varieties and water-management practices that reduce methane emissions; crop varieties that resist higher temperatures, tolerate greater disease and insect pressures, and withstand exposure to drought and excess water; more efficient use of nitrogen fertilizers; simpler and more accurate ways to measure soil carbon; and farming systems that sequester carbon more effectively.

For the world's poorest farmers the global response to climate change could be an enormous opportunity to grow higher-yielding crops, healthier animals, and more sustainable forests, and improve their livelihoods; for all of us, the correct response could protect the environment for future generations.

Projected Changes in Annual Precipitation for the 2050s

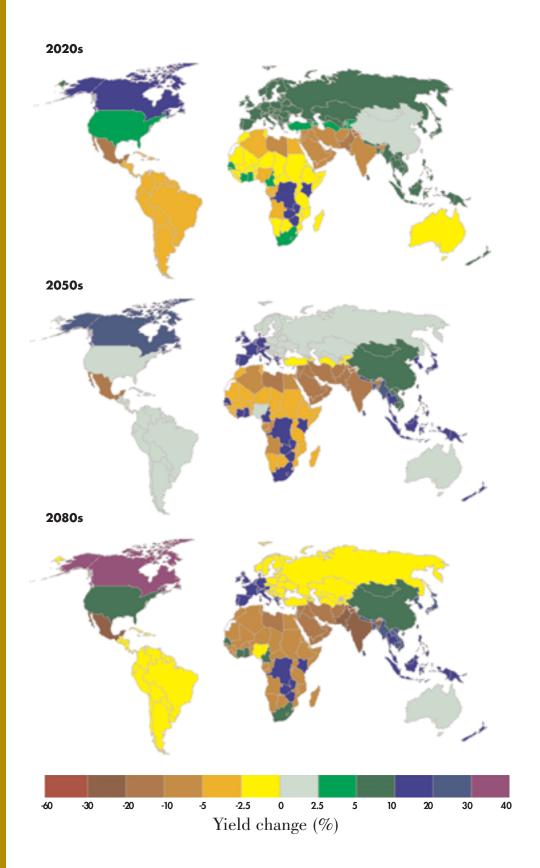




Source: R. Nicholls, Middlesex University in the U.K. Meteorological Office. 1997 <u>Climate</u> <u>Change and Its Impacts:</u> <u>A Global Perspective.</u> Projected change in annual precipitation for the 2050s compared with the present day (with an increase in greenhouse gas concentrations equivalent to about a one percent increase per year in carbon dioxide).

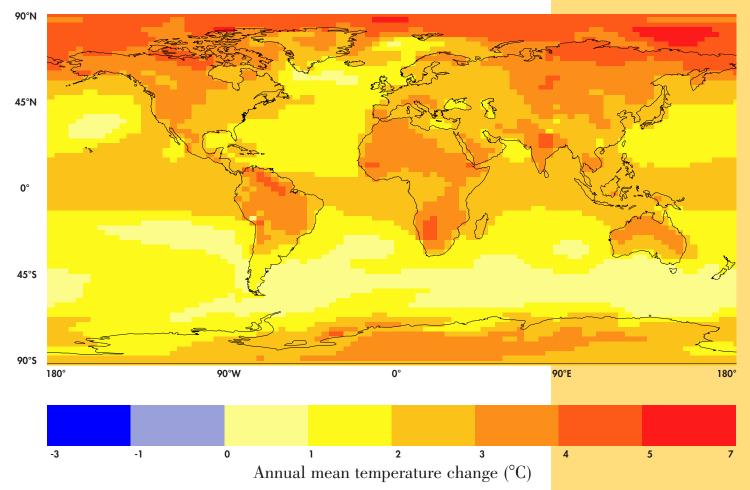
Crop Yield Change

Projected yield changes for wheat, maize, and rice, taking into account carbon dioxide effects (for 2020s, 2050s, and 2080s).



Source: Jackson Institute, University College London/Goddard Institute for Space Studies/International Institute for Applied Systems Analysis.

Projected Changes in Annual Temperatures for the 2050s



Source: The Met Office. Hadley Centre for Climate Prediction and Research

Projected changes in annual temperatures for the 2050s compared with the present day (with an increase in greenhouse gas concentrations equivalent to about a one percent increase per year in carbon dioxide).

People at Risk from a 44 cm Sea-Level Rise by the 2080s



People at risk from a 44 cm sea-level rise by the 2080s, assuming 1990s level of flood protection.

Source: R. Nicholls, Middlesex University in the U.K. Meteorological Office, 1997.



Agricultural Research and Climate Change:

Why CGIAR Science Is Relevant to the Needs of Poor Farmers

s evidence mounts that the earth's climate is becoming warmer, the predicted effects of climate change on developing-country agriculture—for instance, on the productivity of crops, livestock, forestry, and fisheries—are of enormous significance to millions of small farmers, and the ecosystems on which they depend. In addition, these farmers can help mitigate global warming by sequestering carbon in their agricultural systems. Thus, global climate change is inextricably linked to the CGIAR's goals of food security, poverty reduction, and environmental protection.

Agricultural activities are cited as one of the leading causes of climate change, contributing some 20 percent of all greenhouse gas (GHG) emissions. For the CGIAR, the challenge of mitigating and adapting to climate change depends on knowing which ecosystems are at risk, gauging their levels of vulnerability, and knowing how and where the most carbon can be sequestered, and emissions of other GHGs minimized in differing ecosystems. Identifying and closing such "knowledge gaps" is key to mitigating, and adapting to, climate change.

To develop a coherent, systemic response to the challenges posed by climate change, and to enhance agriculture-related climate change research capacity within the CGIAR, an Inter-Center Working Group on Climate Change was established in 1998 under the leadership of the International Centre for Research in Agroforestry (ICRAF). CGIAR's climate change—research agenda aims to develop:

- Strategies to *mitigate* the accumulation of greenhouse gases (for instance, by increasing carbon stocks in agroecosystems, improving nitrogen-use efficiency and reducing nitrous oxide emissions, improving water-use efficiency, and promoting increased carbon sequestration through improved management of croplands, forests, and grazing lands)
- Strategies to *adapt* to the consequences of climate change (for instance, making crops, livestock, tree species, and their husbandry more efficient under changing climatic conditions; integrated gene management for enhancing germplasm for higher yields and better resistance to abiotic and biotic stresses; protection of *in situ* biodiversity; and development of tools to cope with erratic water resources)



BY PEDRO A. SANCHEZ, CHAIRMAN INTER-CENTER WORKING GROUP ON CLIMATE CHANGE

■ Better models to predict the *impact* of global climate change on tropical crops.

The Inter-Center Working Group on Climate Change has developed a portfolio of 11 research proposals, including mitigation and adaptation components. These include:

- Identifying hot spots for carbon removal
- Exploring soil carbon and nitrogen dynamics
- Measuring soil carbon at the project level
- Identifying carbon sequestration potentials in differing agroecosystems
- Increasing nitrogen-use efficiency to reduce nitrous oxides emissions to the atmosphere
- Studying carbon dynamics during the rehabilitation of degraded croplands, grasslands, and cleared forests
- Increasing carbon sequestration and minimizing methane and nitrous oxide emissions in rice farming
- Reducing methane emissions in semi-arid pastoral systems
- Building institutional capacities in developing countries on agricultural and climate change
- Pursuing carbon sequestration with a human face: offset projects based on smallholder farming communities in developing countries
- Conducting *ex ante* studies of the impact of CGIAR research on GHG emissions over the next 25 years.

One of the initial studies conducted by the working group was to assess the Green Revolution's impacts on global climate change. The results illustrate the positive effects of farm intensification on preventing additional global warming.

During the period from 1965 to 1995, high-yielding Green Revolution technologies "saved" 426 million hectares of land from being brought under the plow, thereby preventing the release of 570 megatons of carbon per year into the atmosphere. The beneficial effects of Green Revolution technologies apply to all the "culprit gases" that are responsible for global warming. For example, during the period from 1965 to 1995 carbon dioxide emissions from soil and vegetation were estimated at 202 megatons per year, compared to 766 megatons that would have been emitted without the new land-saving technology. Similarly, 7 megatons of methane were emitted, compared to 13 megatons of methane that would have been released into the atmosphere without the new technology. (There was no difference in the emission of nitrous oxide with or without the new technology.)

Smallholder farming is extremely susceptible to the vagaries of nature. A failed harvest can be a calamitous event, with severe economic and social repercussions for small farmers. Predictions are that poor countries will be hit hardest by global warming; several CGIAR research programs are focused on these vulnerable areas. For instance, CGIAR crop improvement programs are now incorporating the predicted future climates at key locations in their research programs. The following examples illustrate aspects of this work.

REDUCED TILLAGE IN RICE-WHEAT ROTATIONS CAN SAVE LARGE AMOUNTS OF CARBON EMISSIONS IN THE INDO-GANGETIC PLAINS

Under the aegis of an innovative program entitled the "Rice-Wheat Consortium for the Indo-Gangetic Plains," five Future Harvest Centers supported by the CGIAR are working with the national agricultural research programs of Bangladesh, India, Nepal, and Pakistan to investigate how low and reduced tillage practices in rice-wheat rotations can maximize yields, conserve soil and water, and contribute to the slowing of global warming.

The area under study (the Indo-Gangetic Plains) is the most intensely cropped agricultural land in the world, and a source of food and livelihood for nearly 1 billion people, many among the poorest of the poor in South Asia.

The potential beneficial results from some simple changes in land management are compelling. Widespread adoption of one or several reduced-tillage methods could annually save irrigation water (as much as 5 billion cubic meters) and diesel fuel (0.5 billion liters), and reduce pesticide use significantly. The fuel savings alone would represent an annual reduction of 1.3 million tons of carbon emissions-emissions that are the principal contributor to global warming. Furthermore, CGIAR scientists are working with farmers to minimize burning of crop residues, with the potential to further reduce annual carbon emissions by 17 million tons. All these gains are economic, environmental, and social win-wins.

The Centers involved in this innovative effort include the Centro Internacional de Mejoramiento de Maïz y Trigo (CIMMYT), the Centro Internacional de la Papa (CIP), the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), the International Rice Research Institute (IRRI), and the International Water Management Institute (IWMI).

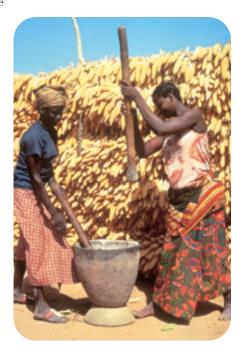
USING FOREST CARBON CONTENT FOR SUSTAINABLE DEVELOPMENT

Climate change specialists have long agreed that forestry and land-use changes in the tropics are, on balance, large sources of greenhouse gas emissions. Efforts to reduce these net emissions through forest-based mitigation actions have included afforestation and reforestation, reduced-impact logging, forest conservation, and improved forest management.

Another Future Harvest Center, the Center for International Forestry Research (CIFOR), has been working on the management and use of forests to either sequester carbon or to reduce emissions of greenhouse gases to the atmosphere. Forests have much higher forest carbon stocks than most nonforested land uses, and can be either significant sinks or sources of greenhouse gases. Clearing a tropical forest for conversion to agriculture or agroforestry releases hundreds of

tons of carbon into the atmosphere—and many ways has the same atmospheric effects as the combustion of fossil fuels. CIFOR scientists are measuring potential carbon gains, either from avoided deforestation or





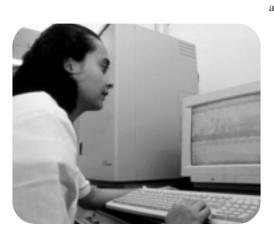
from planting trees in climate-action projects, and are evaluating the social and environmental impacts of these projects. Their research also focuses on the opportunities and risks to local communities, a major concern of environmental groups and governments. Preliminary results from this work have been presented as policy briefs which help to inform public policymakers about the need to increase economic opportunities for local communities, and to protect the livelihoods of people in areas where such projects would be implemented.

AGROFORESTRY—THE TOP CARBON SEQUESTRATION PRACTICE

Another promising area of CGIAR research is transforming low-productivity croplands to agroforestry systems. This effort, led by ICRAF, is demonstrating how conversion of unproductive croplands and grasslands to agroforestry has the highest potential to soak up maximum amounts of atmospheric carbon—at rates on the order of 3 tons of carbon per hectare per year. This conversion occurs in the process of replenishing the soil fertility of smallholder farms in Sub-Saharan Africa, and in implementing tree-based alternatives to slash-and-burn agriculture at the margins of the humid tropical forests worldwide. The potential contribution of converting degraded croplands and grasslands into agroforestry systems is predicted to be 390 million metric tons of carbon per year by the year 2010.

PREDICTING THE IMPACT OF GLOBAL CLIMATE CHANGE ON TROPICAL AGRICULTURE

Scientists at two Future Harvest Centers—the Centro Internacional de Agricultura Tropical (CIAT) and the International Livestock Research Institute (ILRI)—have developed



and tested a new approach for predicting the impacts of global climate change on specific crops grown in the tropics. MarkSim, a new software package that uses a Markov rainfall model to simulate weather data, can predict day-by-day rainfall and

temperature information for any point in Africa, Asia, or Latin America. Agricultural decisionmakers in those three continents will be able to use MarkSim output to better plan mitigation measures, and counter the effects of global warming on farming communities and urban food supplies. Mark-Sim draws on long-term input from 9,200 weather stations around the world; comprehensive testing shows MarkSim can deliver robust results, even for those areas where weather data have not been collected.

MarkSim is showing considerable promise in mapping yield probability of staple crops. As part of a case study in quantifying the effects of global climate change on tropical agriculture, scientists from CIAT and ILRI applied MarkSim in combination with two other well-known classes of computer models. The results follow.

First, the results from the Hadley General Circulation model (which conservatively predicts average temperatures in the tropics to rise 3 degrees Celsius over the next 30 years) were matched with simulated weather data from MarkSim for southern Africa (including Zimbabwe and most of Mozambique and Namibia). Next, the results were fed into reliable crop models to simulate the weather effects on maize and pasture growth in the targeted region. The picture that emerged from preliminary modeling results depicts increasingly risky agriculture, with dire consequences for small farmers. In most areas, the model predicted marked decreases in the yields and yield-stability of maize and pastures. The modeling exercise has potential applications to all CGIAR-mandate crops.

While other approaches have been able to discern these downward trends in yields, the CIAT and ILRI approach—unique in its ability to interpolate daily weather data—establishes the future probability of dry spells that can adversely affect yields, and, ultimately, human well-being. The challenge will be to incorporate information and output from tools such as MarkSim into long-term planning of agricultural research and development aimed at providing farmers with new options for coping with climate change.

As the above examples show, global climate change is inexorably linked to the CGIAR's goals of food security, poverty reduction, and environmental protection. As a strategic, knowledge-intensive organization, the CGIAR has a major responsibility to bring the drivers of global climate change into the agricultural research and capacity-building agenda. Ultimately, the developing countries that bear a disproportionate burden of the negative effects of global climate change will benefit.

About the CGIAR-Supported Future Harvest Centers



CIAT—Centro Internacional de **Agricultura Tropical** (International Center for Tropical Agriculture)

www.cgiar.org/ciat

Headquarters: Cali, Colombia Director General: Joachim Voss Board Chair: Lauritz B. Holm-Nielsen

Founded: 1967 Joined the CGIAR: 1971

Regional Offices: Quito, Ecuador; Awassa, Ethiopia; Tegucigalpa, Honduras; Nairobi, Kenya; Vientiane, Lao People's Democratic Republic; Lilongwe, Malawi; Managua, Nicaragua; Pucallpa, Peru; Arusha, Tanzania; Bangkok, Thailand; Kampala, Uganda.

Focus: To reduce hunger and poverty in the tropics through collaborative research that improves agricultural productivity and natural resource management. Research focuses on developing germplasm of beans, cassava, and tropical forages worldwide and of rice in tropical America and on improving natural resource management in tropical American hillsides, forest margins, and savannas as well as East African midaltitudes and Southeast Asian uplands.



CIFOR—Center for International Forestry Research

www.cgiar.org/cifor

Headquarters: Bogor, Indonesia Director General: Jeffrey A. Sayer Board Chair: Jagmohan S. Maini

Founded: 1993 Joined the CGIAR: 1993

Regional Offices: Belem-Para, Brazil; Harare, Zimbabwe; Yaounde, Cameroon;

Costa Rica.

Focus: CIFOR was established in 1993 as part of the Consultative Group on International Agricultural Research (CGIAR) in response to global concerns about the social, environmental, and economic consequences of forest loss and degradation. CIFOR research produces knowledge and methods needed to improve the well-being of forest-dependent people, and to help tropical countries manage their forests wisely for sustained benefits. This research takes place in more than two dozen countries, in collaboration with numerous partners. Since its founding, CIFOR has also played a central role in influencing global and national forestry policies.



CIMMYT—Centro Internacional de Mejoramiento de Maïz y Trigo (International Maize and Wheat **Improvement Center)**

www.cimmyt.mx

Headquarters: Mexico City, Mexico Director General: Timothy Reeves Board Chair: Alex McCalla

Founded: 1966

Joined the CGIAR: 1971

Regional Offices: Dhaka, Bangladesh; Santa Cruz, Bolivia; Beijing, China; Cali, Colombia; San José, Costa Rica; Addis Ababa, Ethiopia; Guatemala, Guatemala; New Delhi, India; Almaty, Kazakhstan; Nairobi, Kenya; Kathmandu, Nepal; Metro Manila, Philippines; Aleppo, Syrian Arab Republic; Bangkok, Thailand; Ankara,

Turkey; Montevideo, Uruguay; Harare, Zimbabwe.

Focus: CIMMYT is an international, nonprofit, agricultural research and training center dedicated to helping the poor in low-income countries. CIMMYT helps alleviate poverty by increasing the profitability, productivity, and sustainability of maize and wheat farming systems. Work concentrates on maize and wheat, two crops vitally important to food security. These crops provide about one-fourth of the total food calories consumed in low-income countries, are critical staples for poor people, and are an important source of income for poor farmers.



CIP—Centro Internacional de la Papa (International Potato Center)

www.cipotato.org

Headquarters: Lima, Peru

Director General: Hubert Zandstra Board Chair: David R. MacKenzie

Founded: 1971

Joined the CGIAR: 1973

Regional Offices: Quito, Ecuador; Nairobi, Kenya; Kampala, Uganda; New Delhi, India; Islamabad, Pakistan; Bogor, Indonesia; Los Baños, Philippines; Beijing, China;

Hanoi, Vietnam.

Focus: The International Potato Center (CIP) seeks to reduce poverty and achieve food security on a sustained basis in developing countries through scientific research and related activities on potato, sweet potato, and other root and tuber crops, and on the improved management of natural resources in the Andes and other mountain areas.





ICARDA—International Center for Agricultural Reseach in the Dry Areas

www.icarda.cgiar.org

Headquarters: Aleppo, Syrian Arab

Republic

Director General: Adel El-Beltagy Board Chair: Robert D. Havener

Founded: 1977

Joined the CGIAR: 1978

Regional Offices: Damascus, Syrian Arab Republic; Beirut, Lebanon; Cairo, Arab Republic of Egypt; Tunis, Tunisia; Rabat, Morocco; Amman, Jordan; Ankara, Turkey; Tehran, Islamic Republic of Iran; Dubai, United Arab Emirates; Dhamar, Republic of Yemen; Lima, Peru; Tashkent, Uzbekistan. Focus: ICARDA serves the entire developing world for the improvement of lentil, barley, and faba beans; all dry-area developing countries for the improvement of on-farm wateruse efficiency, rangeland, and smallruminant production; and the West and Central Asia, and North Africa regions for the improvement of bread and durum wheat, chickpea, and farming systems. ICARDA's research provides global benefits of poverty alleviation through productivity improvements integrated with sustainable natural resource management practices. ICARDA meets this challenge through research, training, and dissemination of information, in partnership with national agricultural

research and development systems.



ICLARM—International Center for Living Aquatic Resources Management

www.iclarm.cgiar.org

Headquarters: Penang, Malaysia Director General: Meryl J. Williams

Board Chair: Kurt J. Peters

Founded: 1977

Joined the CGIAR: 1992

Regional Offices: Dhaka, Bangladesh; Zomba, Malawi; Tortola, British Virgin Islands; Giza, Arab Republic of Egypt; Los Baños, Philippines; Nha Trang, Vietnam; Nusa Tupe, Solomon Islands; Yaoundé,

Cameroon.

Focus: To promote sustainable development and use of living aquatic resources based on environmentally sound management. About 1 billion people rely on fish as a source of animal protein, and 150 million people depend on fish for employment. There are 80 or 90 million more people in the world every year to be fed, most of them in poor and developing countries. Natural fish stocks are being severely depleted and are under serious threat. Many forms of aquaculture have yet to prove their sustainability and become accessible to the poor. The declining state of aquatic resources and threatened sustainability of fisheries calls for research to raise and sustain the productivity of fisheries and aquaculture systems, protect the aquatic environment, save aquatic biodiversity, improve policies for sustainable development of aquatic resources, and strengthen the capacity of national programs to support sustainable development.



ICRAF—International Centre for Research in Agroforestry

www.icraf.cgiar.org

Headquarters: Nairobi, Kenya Director General: Pedro A. Sanchez Board Chair: Lucie Edwards

Founded: 1977

Joined the CGIAR: 1991

Regional Offices: Nairobi, Kenya; Pucallpa, Peru; Bamako, Mali; Bogor, Indonesia;

Harare, Zimbabwe.

Focus: To conduct innovative research and development in agroforestry, strengthen the capacity of our partners, enhance world-wide recognition of the human and environmental benefits of agroforestry, and provide scientific leadership in the field of integrated natural resource management. ICRAF will do this by combining the best of science with farmers' knowledge in a wide range of strategic alliances across the research-development continuum.



ICRISAT—International Crops Research Institute for the Semi-Arid Tropics

www.icrisat.cgiar.org

Headquarters: Patancheru, Andhra Pradesh,

India

Director General: William D. Dar Board Chair: Martha B. Stone

Founded: 1972 Joined the CGIAR: 1972

Regional Offices: Niamey, Niger; Bamako, Mali; Kano, Nigeria; Bulawayo, Zimbabwe; Nairobi, Kenya; Lilongwe, Malawi;

New Delhi, India.

Focus: To help developing countries apply science to increase crop productivity and food security, reduce poverty, and protect the environment. ICRISAT focuses on the farming systems of the semi-arid tropical areas of the developing world, where low rainfall is the major environmental constraint to agriculture. Special emphasis is placed on five crops that are particularly important in the diets of the poor: sorghum, millet, groundnut, chickpea, and pigeonpea. ICRISAT forms research partnerships with governmental, nongovernmental, and private sector organizations in developing countries, and links these partners to advanced research institutions worldwide. ICRISAT's vision is "Science with a Human Face," tailoring research to address real human needs across the semi-arid tropics.



IFPRI—International Food Policy Research Institute

www.ifpri.cgiar.org

Headquarters: Washington, D.C., United States of America Director General: Per Pinstrup-Andersen

Board Chair: Geoff Miller

Founded: 1975

Joined the CGIAR: 1980

Focus: To identify and analyze policies for sustainably meeting the food needs of the developing world. Research at IFPRI concentrates on economic growth and poverty alleviation in low-income countries, improvement of the well-being of poor people, and sound management of the natural resource base that supports agriculture. IFPRI seeks to make its research results available to all those in a position to use them and to strengthen institutions in developing countries that conduct research relevant to its mandate.



IITA—International Institute of Tropical Agriculture

www.iita.org

Headquarters: Ibadan, Nigeria Director General: Lukas Brader Board Chair: Enrico Porceddu

Founded: 1967 Joined the CGIAR: 1971

Regional offices: Kano and Onne, Nigeria; Cotonou, Benin; Yaoundé, Cameroon;

Namulonge, Uganda.

Focus: To enhance the food security, income, and well-being of resource-poor people (primarily in the humid and subhumid zones of Sub-Saharan Africa) by conducting research and related activities to increase agricultural production, improve food systems, and sustainably manage natural resources in partnership with national and international stakeholders. IITA undertakes crop improvement activities on cassava, yam, soybean, cowpea, maize, plantain, and banana. The Institute pays attention to low external input strategies and other alternatives to shifting cultivation, and works actively on the biological control



ILRI—International Livestock Research Institute

www.cgiar.org/ilri

Headquarters: Nairobi, Kenya; Addis

Ababa, Ethiopia

Director General: Hank Fitzhugh Board Chair: John E. Vercoe

Founded: 1995

Joined the CGIAR: 1995

Regional Offices: Ibadan, Nigeria; Lima, Peru; Cali, Colombia; Niamey, Niger; Andhra Pradesh, India; Bobo-Dioulasso, Burkina Faso; Makati City, Philippines. Focus: To increase animal health, nutrition, and productivity, and to protect environments supporting animal production by tailoring production systems and developing technologies that are sustainable over the long term. ILRI works to characterize and conserve the genetic diversity of indigenous tropical forage species and livestock breeds and to promote equitable and sustainable national policies for animal agriculture and related natural resource management.



IPGRI—International Plant Genetic Resources Institute

www.ipgri.cgiar.org

Headquarters: Rome, Italy

Director General: Geoffrey C. Hawtin Board Chair: Marcio de Miranda Santos

Founded: 1974

Joined the CGIAR: 1974

Regional Offices: Nairobi, Kenya; Cotonou, Benin; Cali, Colombia; Serdang, Malaysia; Beijing, China; New Delhi, India; Aleppo, Syrian Arab Republic; Rome, Italy; Ibadan, Nigeria; Lima, Peru; Niamey, Niger;



Andhra Pradesh, India; Bobo-Dioulasso, Burkina Faso; Makati City, Philippines.
Focus: IPGRI and its partners conserve and use the genetic variation in plants to create crop varieties that are more productive, stronger, and more nutritious. These varieties contribute to better agriculture that can help sustain our families, build prosperity, improve our health, and renew the earth.



IRRI—International Rice Research Institute

www.irri.cgiar.org

Headquarters: Los Baños, Philippines Director General: Ronald P. Cantrell Board Chair: Roelof Rabbinge

Founded: 1960 Joined the CGIAR: 1971

Regional Offices: Dhaka, Bangladesh; Phnom Penh, Cambodia; Beijing, China; New Delhi, India; Bogor, Indonesia; Ibaraki, Japan; Vientiane, Lao People's Democratic Republic; Antananarivo and Mahajanga, Madagascar; Yangon, Myanmar; Bangkok and Ubon Ratchathani, Thailand; and Hanoi, Vietnam.

Focus: To improve the well-being of low-income rice producers and consumers by generating and disseminating rice-related knowledge and technology while conserving the natural resource base, taking full advantage of the advancement of science to address emerging development concerns, and to build a stronger linkage of IRRI's research with its outreach staff as well as with national agricultural research and extension systems to fast-track impact.



ISNAR—International Service for National Agricultural Research

www.cgiar.org/isnar

Headquarters: The Hague, Netherlands Director General: Stein W. Bie Board Chair: Moise C. Mensah

Founded: 1979 Joined the CGIAR: 1980

Regional Offices: San José, Costa Rica; Washington, D.C., United States of America; Ibadan, Nigeria; Los Baños,

Philippines.

Focus: To enhance the capacity of agricultural research organizations to respond to their clients' needs and to emerging challenges. To expand global knowledge on agricultural research policy, organization, and management. To improve developing countries' access to knowledge on agricultural research policy, organization, and management.



IWMI—International Water Management Institute

www.cgiar.org/iwmi

Headquarters: Battaramulla, Sri Lanka Director General: Frank Rijsberman Board Chair: Klaas Jan Beek

Founded: 1984

Joined the CGIAR: 1991

Regional Offices: Battaramulla, Sri Lanka; Bangkok, Thailand; Lahore, Pakistan; Preto-

ria, South Africa; and India.

Focus: Improving water and land resource management for food, livelihoods, and nature. The Institute's research is done through five themes: Integrated Water Management for Agriculture; Sustainable Smallholder Water and Land Management Systems; Sustainable Groundwater

Management; Water Resources Institutions and Policies; and Water, Health, and Envi-

ronment. The Institute's research program is put into action through a network of regional offices in Africa and Asia. This work is complemented by a series of Benchmark Basins that serve as IWMI's field laboratories. River basins in Sri Lanka, Pakistan, and southern Africa have been identified as the first Benchmark Basins. Others will be selected over the coming five years. A priority for the Institute is to do action research, much of which can be translated into practical advice and tools that partners and developing countries can use to better understand their water and land situations.



WARDA—West Africa Rice Development Association

www.warda.cgiar.org

Headquarters: Bouaké, Côte d'Ivoire Director General: Kanayo F. Nwanze

Board Chair: Lindsay Innes

Founded: 1970

Joined the CGIAR: 1975

Regional Offices: St. Louis, Senegal;

Ibadan, Nigeria.

Focus: WARDA's mission is to contribute to food security and poverty alleviation in poor rural and urban populations, particularly in West and central Africa, through research, partnerships, capacity strengthening, and policy support on rice-based systems, and in ways that promote sustainable agricultural development based on environmentally sound management of natural resources. To achieve this, WARDA aims at three complementary ecological goals: (i) stabilization and intensification of rainfed upland ricebased systems; (ii) diversification and intensification of rainfed lowland ricebased systems; and (iii) improving resource use efficiency in irrigated rice-based systems.



Table of Contents CGIAR Financial Report 2000

OVERVIEW: 29 YEARS OF CGIAR INVESTMEN	T
(1972-2000)	2 7
FINANCIAL REPORT 2000	28
Introduction	28
Overall Financial Outcome	28
Composition of Funding	28
Sources of Funding	28
Program Investments	28
Center Highlights	28
Co-Sponsor Support	29
Financial Position	29
2000 CGIAR FUNDING	3 3
CGIAR Contributions	33
Evolution of 2000 Support to the Approved Research Agenda	33
Overall Financial Outcome	34
Contribution Profile	34
Disbursements	36
Center Perspective	39
Funding Modalities	41
Unrestricted Support	41
Restricted Support	41
Co-Sponsor Support	41
World Bank Support	41
AGENDA RESOURCES	44
Allocation of Resources	44
By Undertaking	44
By Region	44
By Object of Expenditure	44
Cost Changes	45
CGIAR Investments over 29 Years	45
FINANCIAL POSITION	5 0
Net Assets	50
Unappropriated Net Assets	53
Appropriated Net Assets	53
Net Fixed Assets	53
Capital Purchase Fund	53
Liquidity	53
Current Ratio	56
Working Capital	56
COMPLIANCE WITH FINANCIAL GUIDELINES	5 8
Acronyms and Abbreviations	26

Table of Figures, Tables, and Boxes

Figure 1	CGIAR funding, 1996–2000	33
Figure 2	Agenda contributions by Member group, 1999–2000	34
Figure 3	Contributions by Center and Member group, 2000	35
Figure 4	Top 13 contributors, 2000	37
Figure 5	Center support by top 13 contributors, 2000	37
Figure 6	Disbursement of funds, 2000	38
Figure 7	Funding by Center, 2000	38
Figure 8	Funding outcomes vs. financing plans, 2000	39
Figure 9	Changes in Center funding, 1999–2000	40
Figure 10	Agenda funding by funding type, 2000	40
Figure 11	Distribution of World Bank support, 2000	42
Figure 12a	Investments in CGIAR undertakings, 2000	45
Figure 12b	Center investments in increasing productivity	46
Figure 12c	Center investments in protecting the environment	46
Figure 12d	Center investments in saving biodiversity	47
Figure 12e	Center investments in improving policies	47
Figure 12f	Center investments in strengthening NARS	48
Figure 13	CGIAR allocations by developing region, 2000	49
Figure 14	CGIAR expenditure by object, 2000	49
Figure 15	Net assets by Center, 2000	50
Figure 16	Unappropriated net assets by Center, 2000	51
Figure 17	Net fixed assets by Center, 2000	51
Figure 18	Capital purchase fund by Center, 2000	54
Figure 19	Member receivables by Center, 2000	54
Figure 20	CGIAR System current ratio, 1996–2000	55
Figure 21	Working capital by Center, 1999–2000	55
Box 1	Annual Financial Decisionmaking Process and Schedule	31
Box 2	Financial Concepts and Terminology	32
Table 1	CGIAR Financial Highlights, 1996–2000	30
Table 2	Contributions by Other Donors, 1999 and 2000	36
Table 3	Allocation of World Bank Funding, 1999–2000	43
Table 4	CGIAR System Financial Position, 1996–2000	52

ANNEX TABLES

Table A1.1	CGIAR Contributions to the Approved Research Agenda by Member, 1972–2000	59
Table A1.2	CGIAR Contributions to the Approved Research Agenda by Center, 1972–2000	60
Table A2.1	Ranking Contributions to the CGIAR Research Agenda, 1997–2000	61
Table A2.2	CGIAR Funding by Member, 2000	62
Table A2.3a	Support to the Agreed Research Agenda by Member by Center, 2000	63
Table A2.3b	Member Support to the Approved Research Agenda by Center, 2000	64
Table A2.4a	Monthly Disbursement of Funding by Member, 2000	65
Table A2.4b	Member Contributions Disbursed through the World Bank, 1999–2000	66
Table A2.5	CGIAR Funding by Center, 2000	67
Table A2.6	Funding Outcome by Center, 2000	68
Table A2.7	CGIAR System Grants by Center, 1996–2000	69
Table A2.8	World Bank Funding by Center, 1996–2000	70
Table A3.1	CGIAR Investments by Center, 1996–2000	71
Table A3.2	CGIAR Research Agenda Investments by Activity, 1996–2000	72
Table A3.3	Centers' Research Agenda Investments by Activity, 2000	73
Table A3.4	Regional Allocations, 2000	74
Table A3.5	CGIAR Object Expenditures, 2000	75
Table A3.6	CGIAR Staffing, 1996–2000	76
Table A3.7	Centers' Inflation Rates, 1996–2000	77
Table A4.1	Centers' Financial Positions, 2000	78
Table A4.2	Capital Investments by Centers, 1996–2000	79
Table A5.1	CGIAR Total Investments, 1972–2000	80
Table A5.2	CGIAR Total Expenditures and Sources of Revenue, 1991–2000	81
Table A6.1	CGIAR Program and Research Highlights, 1996–2000	82
Table A6.2	CIAT Program and Research Highlights, 1996–2000	83
Table A6.3	CIFOR Program and Research Highlights, 1996–2000	84
Table A6.4	CIMMYT Program and Research Highlights, 1996–2000	85
Table A6.5	CIP Program and Research Highlights, 1996–2000	86
Table A6.6	ICARDA Program and Research Highlights, 1996–2000	87
Table A6.7	ICLARM Program and Research Highlights, 1996–2000	88
Table A6.8	ICRAF Program and Research Highlights, 1996–2000	89
Table A6.9	ICRISAT Program and Research Highlights, 1996–2000	90
Table A6.10	IFPRI Program and Research Highlights, 1996–2000	91
Table A6.11	IITA Program and Research Highlights, 1996–2000	92
Table A6.12	ILRI Program and Research Highlights, 1996–2000	93
Table A6.13	IPGRI Program and Research Highlights, 1996–2000	94
Table A6.14	IRRI Program and Research Highlights, 1996–2000	95
Table A6.15	ISNAR Program and Research Highlights, 1996–2000	96
Table A6.16	IWMI Program and Research Highlights, 1996–2000	97
Table A6.17	WARDA Program and Research Highlights, 1996–2000	98

Acronyms and Abbreviations

ADB Asian Development Bank **AFDB** African Development Bank ASB Alternatives to Slash and Burn

CGIAR Consultative Group on International Agricultural

Research

DAC Development Assistance Committee (OECD)

EC**European Commission**

FAO Food and Agriculture Organization of the United

Nations

GHG Greenhouse gases **GNP** Gross national product

HIV/AIDS Human immunodeficiency virus/acquired

immune deficiency syndrome

ICW International Centers Week (CGIAR) **IDRC** International Development Research Centre

IFAD International Fund for Agricultural Development IMF International Monetary Fund

IPCC Intergovernmental Panel on Climate Change

IPMIntegrated Pest Management MTM Mid-Term Meeting (CGIAR) MTP Medium-term plan (CGIAR)

NARS National agricultural research system(s)

NGO Nongovernmental organization ODA Official Development Assistance

OECD Organisation for Economic Co-operation and

Development

PwC Pricewaterhouse Coopers

SGRP Systemwide Genetic Resources Program **SPIA** Standing Panel on Impact Assessment TAC Technical Advisory Committee (CGIAR) **TIGR** The Institute for Genomic Research **UNDP** United Nations Development Programme **USAID** United States Agency for International

Development





Overview: 29 Years of CGIAR Investment (1972–2000)

This 29-year time series analysis of CGIAR investments confirms expected trends and reveals some less obvious patterns as well.

As expected, the oldest Centers account for the largest share of the total \$6.3 billion invested. On the high end, IRRI and IITA account for 13 percent and 12 percent of the total, respectively. CIAT and CIMMYT each account for 11 percent of the total. ICRISAT and ILRI, the livestock enterprise, and its predecessors ILCA and ILRAD, each account for 10 percent of the total; ICARDA and CIP account for 8 percent and 7 percent, respectively. The remaining eight Centers together account for 18 percent of investment. At the Center level, investment levels have stabilized.

Increasing productivity has been the largest component, totaling 54 percent overall. Since the early 1990s, however, this undertaking has been receiving a smaller proportion of funds, so that by 2000 it accounted for only 36 percent of all investments. An increasing share of funding has been directed to environmental, biodiversity, and policy undertakings. Of interest, and perhaps of some surprise, is the steady investment, totaling 21 percent overall, in strengthening of NARS.

Recent trends in total production sector and commodity investments confirm that natural resource management increasingly has become a focus of CGIAR activity. By far the largest commodity group has been cereals, which accounts for 45 percent of commodity-sector investments. Of that group, rice has accounted for nearly half of the investment—\$1.1 billion (20 percent overall). Wheat and maize each accounted for about \$0.5 billion (9 percent). In 2000, cereal expenditures remained at 39 percent. Legumes and roots, or tubers, each accounted for 15 percent to 16 percent of commodity-sector investments; these shares have varied little. In the production sectors, the share of investments in crops and livestock has been falling, while that in forestry and fisheries has been climbing.

Sub-Saharan Africa has received the largest regional share of investments, accounting for \$2.6 billion (42 percent of total expenditure). That share has been fairly constant over time. Investments in Asia, mainly in crops, have been \$1.9 billion (30 percent). If the majority of investments in livestock are subtracted from the CGIAR's total investments in Africa, crop investments in Africa approximately equal those in Asia during the 29-year period.

Object-of-expenditure data reveal two interesting trends. First, investments in CGIAR capital assets were relatively much higher in the early years, when the Centers' physical plants were established. But as a share of total investment, these investments have decreased from 24 percent in the first five-year period to 5 percent (represented by depreciation) in 2000. Second, personnel costs decreased from 55 percent of the total expenditure in the mid-1980s to 49 percent in 2000. This percentage reduction is significant in dollar terms because of the large overall share of personnel costs (\$3.3 billion).



Financial Report 2000

Introduction

The funding goal for 2000 was to attain the level of funding approved at ICW99: \$340 million. CGIAR Members contributed \$331 million—\$9 million (3 percent) less than the approved funding goal but \$1 million more than actual funding of \$330 million for 1999. The primary reason for the shortfall was the reduced dollar value of contributions arising from weaker European currencies.

OVERALL FINANCIAL OUTCOME

Member funding of \$331 million, Center-generated income of \$14 million, and extraordinary European Commission (EC) relief funding of \$5 million (\$2 million from reserves; and \$3 million in an advance of 2001 funding) totaled \$350 million in funding to Centers. Eighteen percent of this contribution remained unpaid by the end of the year, however, forcing Centers to curtail expenditures. Total expenditures in 2000 were \$338 million. The resulting surplus of \$12 million replenished the Systems' aggregate unappropriated net assets that had been depleted by \$7 million in 1999 because of the funding default. Included in the \$12 million surplus is an advance of \$3 million of 2001 income and a transfer of \$2 million from System reserves to Center reserves.

COMPOSITION OF FUNDING

In 2000, unrestricted support was 50 percent (\$164 million) of total support, compared with 54 percent (\$179 million) in 1999. Restricted support was \$167 million (50 percent) of total Member funding, compared with \$151 million (46 percent) in 1999.

SOURCES OF FUNDING

The total CGIAR Membership was 58, of which the number of contributing Members was 55. Uganda was a new contributor in 2000.

Industrialized countries provided \$225 million (68 percent) of total support in 2000. This figure was in line with the 1999 amount of \$226 million (68 percent) of the total. International organizations and foundations contributed \$73 million or 22 percent (1999: \$74 million or 22 percent), and developing countries and other donors contributed the remaining \$33 million or 10 percent (1999: \$30 million or 10 percent).

PROGRAM INVESTMENTS

Program investments in 2000 were \$338 million, a decrease of \$9 million (3 percent) from 1999. Distribution of resources by undertaking was consistent with the 2000financing plan. Efforts to increase productivity, the major thrust of CGIAR activities, accounted for 36 percent of total investments (up from 34 percent in 1999). Within this undertaking, crops accounted for 71 percent of investment, livestock for 13 percent, forestry for 12 percent, and fisheries for 4 percent. Within increasing productivity, investments in germplasm enhancement and in production systems development increased marginally. Investment in protecting the environment accounted for 18 percent of total investment (down from 20 percent in 1999). Investment in policy research increased from 13 percent to 14 percent. Investment in biodiversity preservation remained at 10 percent. Investment to strengthen NARS decreased from 23 percent to 22 percent.

In 2000, there were no changes in investment by region. Sub-Saharan Africa, Asia, West Asia and North Africa (WANA), and Latin America and the Caribbean (LAC) accounted for 42 percent, 32 percent, 17 percent, and 9 percent of total investment, respectively.

The trend of lower expenditures for personnel costs continued. In 2000, personnel expenditures decreased to 49 percent of total expenditures from 50 percent in 1999. In absolute terms, these expenditures decreased from \$172 million in 1999 to \$164 million in 2000. In percentage terms, they represent a 7 percent decrease from the 1994–95 average of 56 percent.

CENTER HIGHLIGHTS

Funding for four Centers was at or above levels approved at ICW99. They were CIMMYT, \$4.9 million (up 15 percent); IRRI, \$3.8 million (up 13 percent); CIP, \$2.5 million (up 14 percent); and CIFOR, \$0.2 million (up 2 percent).

Funding for eight Centers was within 10 percent of, and thus broadly in line with, financing plan targets: ICARDA, \$0.3 million (down 1 percent); ICRAF, \$1.1 million (down 5 percent); ICRISAT, \$1.4 million (down 6 percent); IPGRI, \$1.4 million (down 6 percent); ISNAR, \$0.7 million, (down 7 percent); IFPRI, \$1.8 million (down 8 percent); CIAT, \$3.2 million (down 10 percent); and IITA \$3.1 million (down 10 percent).

Funding for the four remaining Centers was 10 percent or more outside their financing plan targets: IWMI, \$1.3 million (down 13 percent); ICLARM, \$2.5 million (down 17 percent); ILRI, \$4.9 million (down 17 percent) and WARDA, \$3.7 million (down 31 percent). These shortfalls primarily reflect lower-than-expected funding from other CGIAR investors and slower-than-planned project implementation.

CO-SPONSOR SUPPORT

The World Bank contributed \$45 million to the CGIAR research program in 2000. Bank support amounted to 14 percent of total CGIAR support. In addition, the Bank funded the annual operating costs of the CGIAR Secretariat (\$4.25 million) and contributed \$0.75 million to TAC. Total support from the Bank, therefore, amounted to \$50 million in 2000, the same as in 1999. FAO and UNDP provided \$0.6 million and \$0.4 million respectively in support of TAC/SPIA. They provided \$0.2 million and \$1.8 million respectively directly to Centers.

FINANCIAL POSITION

The 2000 financial data confirm that the CGIAR as a whole is in a strong financial condition. Total net assets at the end

of 2000 were \$203 million (1999: \$263 million). The decrease in net assets is primarily explained by the write-down of \$74 million in fixed assets following a change in accounting policy. Therefore the decrease represents a book movement.

Net assets are made up of \$62 million (1999: \$44 million) in unappropriated net assets and \$141 million (1999: \$219 million) in appropriated net assets. Appropriated net assets can be further subdivided into capital invested in fixed assets (\$98 million) and funds set aside by Centers for the acquisition of fixed assets (\$43 million).

Cash and cash-equivalent balances equaled \$177 million at the end of 2000 (1999: \$212 million). This figure includes \$26 million in cash and investments disclosed under long-term assets. The primary reason for the reduction in year-end cash holding was the reduction (\$44 million) in donations received in advance. The cash balance of \$177 million represents 192 days of expenditures. The current ratio is 1.74. Capital investments totaled \$15 million in 2000. At the end of 2000, 18 percent of the value of 2000 agenda contributions (\$61 million), or two months of income, was outstanding as accounts receivable from Members.

Table 1 CGIAR Financial Highlights, 1996–2000

(millions of U.S. dollars)

	199	6	1997	7	1998	1999	2000
A December summers							
A. Resource summary (millions of U.S. dollars)	Agenda	Total	Agenda	Total	Total	Total	Total
,	9		0				
CGIAR contributions	304	332	320	333	340	330	331
Annual change (percent)	13%	1%	5%	0%	2%	(3%)	0%
Other revenue	14		13		13	12	14
Finance Committee EC alloca	ation	244		244	2.52	2.40	5
Total revenue	205	346 355	333	346 346	353 337	342 349	350 338
System expenditure Net surplus/(deficit)	325		333	340	16	(7)	12
Agenda funding, percent of	total	(9) 92%		96%	100%	100%	100%
Restricted funding, percent of		41%		39%	47%	46%	50%
Number of contributing	or ioidi	41/0		J 7 /6	47 /0	40%	30%
CGIAR Members		44		50	54	55	55
COD III MONDOIS				30	04	00	33
B. Expenditure share profile	(percent)						
CGIAR undertakings							
Increasing productivity		40%		40%	37%	34%	36%
Protecting the environment		16%		17%	19%	20%	18%
Saving biodiversity		11%		11%	11%	10%	10%
Improving policies		12%		11%	12%	13%	14%
Strengthening NARS		21%		21%	21%	23%	22%
Region							
Sub-Saharan Africa (SSA)		38%		40%	40%	42%	42%
Asia		33%		31%	32%	32%	32%
Latin America and the		1 70/		1.70/	1.00/	1.70/	1.70/
Caribbean (LAC)		17%		17%	18%	17%	17%
West Asia and North Africa		12%		12%	10%	9%	9%
(WANA) Object		I Z /o		I Z /o	10/6	9 /0	7/0
Personnel		53%		51%	50%	50%	49%
Supplies/services		34%		36%	37%	38%	39%
Travel		7%		7%	7%	7%	7%
Depreciation		6%		6%	6%	5%	5%
Tr							
C. CGIAR staff (number)							
International staff		897		862	892	907	873
Other staff		9,416		8,295	7,578	7,701	7,642
Total staff		10,313		9,157	8,470	8,608	8,515
D. COLAD firm will in direction							
D. CGIAR financial indicators		15		12	50	4.4	40
Unappropriated net assets (U Unappropriated net assets in		45		43	52	44	62
Days (revenue)		48		45	54	49	67
Appropriated net assets (U.S	dollars	277		273	271	219	141
Net fixed assets (U.S. dollars		231		232	227	174	98
Current ratio	1	1.6		1.7	1.8	1.6	1.7
Memo notes:						0	,
Centers' cost deflator							
(1999=1.00)		0.92		0.95	0.98	1.00	1.00
•							

Note: Excludes a contribution of \$5 million from the World Bank to cover the cost of the CGIAR Secretariat and TAC.

Box 1 Annual Financial Decisionmaking Process and Schedule

Introduction of Research Agenda (October). The CGIAR's Technical Advisory Committee (TAC) introduces the research agenda at the International Centers Week (ICW). Planning, including revision of estimates of resource requirements, thus begins approximately 14 months before the start of activity.

Submission of Centers' Medium-Term Plans (March). Centers prepare and submit three-year, medium-term plans (MTPs). These plans update original proposals, taking into account current activity, changes in the research environment, and subsequent plan modifications (which may be introduced in the third year of the period covered by the plans).

Discussion of Proposed Plans (April). The Centers and the TAC discuss the proposed MTPs.

Setting of Agenda (May). At the mid-term meeting (MTM), the TAC proposes the next year's research agenda on the basis of three-year plans presented by the Centers. The CGIAR debates the TAC's recommendations, taking into consideration advice from the Finance Committee on funding prospects, and endorses the proposed research agenda and financial allocations, with or without modification. Following the MTM, the Members indicate general levels of financing so that the Centers can prepare their financing plans.

Preparation of Financing Plans (June–September). Centers prepare their individual financing plans for the following year on the basis of financing information solicited through bilateral contacts with Members. World Bank funding is reflected in the plans on a percentage basis of funding secured by Centers from their Members—11.5 percent in 1999 and 12 percent in 2000.

Confirmation of Program Content (mid-September). On the basis of interactions with their Members, Centers determine whether any changes in funding for the research agenda are expected. They communicate these changes and their implications for program content to the TAC and the CGIAR Secretariat. The TAC reviews this content and highlights the need for any significant CGIAR action at ICW.

Review of Financing Plans (end of September to beginning of October). Following confirmation of program content by the TAC, the Finance Committee reviews Center financing plans on the basis of funding information solicited by the CGIAR Secretariat. During this effort, the Committee scrutinizes the consistency and feasibility of the proposed World Bank contribution to each Center's funds.

Approval of Research Agenda and Financing Plans (October). At ICW, the CGIAR reviews and approves the finalized research agenda and Center financing plans for the following year.

Implementation of Agenda and Disbursement of Funds (January–December). Centers commence implementation of the research agenda on January 1, and Members disburse funds to the Centers throughout the year.

Preparation of Financial Statements (December). At the end of the calendar year, Centers prepare audited financial statements showing the use of the funds received in support of the research agenda

Box 2 Financial Concepts and Terminology

Research Agenda. The research agenda is made up of all the Center activities. One or more Centers may execute these activities jointly with national agricultural research systems (NARS), advanced research institutions, or nongovernmental organizations (NGOs). Centers develop the agenda and conduct programs in collaboration with partners. The TAC reviews the agenda and, if appropriate, recommends it for CGIAR financing. Projects included in the agenda should:

- Aim to produce research or research-related international public goods (including train-
- Be of high priority with regard to accomplishment of the CGIAR's goals and objectives
- Have acceptable probabilities of success, and
- Have no alternative producers or sources of supply with suitable costs or reliability.

Agenda Financing. The research agenda, as endorsed by the CGIAR, is eligible for financing by Members, including the World Bank. The approved financial requirements are the minimum financial requirements for implementing the agenda. All Centers and partners are encouraged to maximize financing. Mechanisms to ensure that the agenda is fully funded have evolved from unsuccessful attempts to "guarantee" full financing through the sole use of World Bank funds. Members, instead of the World Bank alone, now act collectively to fill any financial gaps that might arise in the course of the year.

Financing Modalities. Centers are primarily financed through annual support from CGIAR Members. Modest amounts are also available from Centers' annual miscellaneous income, including ad hoc contributions from organizations that are not CGIAR Members. Member financing may be unrestricted and directed to the CGIAR with flexibility regarding allocation based on CGIAR priorities; or to Centers, or to programs. Alternatively, Member financing may be restricted and directed to a specific Center program, project, subproject, or activity as defined in a contractual agreement.

All Members are expected to help pay the full cost of Center operations, including administrative costs, of which they must bear a proportionate share. World Bank financing always is made available as general CGIAR support. All Members are encouraged to provide their support in a similar manner. Members usually disburse funds directly to Centers throughout the year. The CGIAR Secretariat provides disbursement services, through the World Bank, to Members that prefer to make an annual disbursement.

CGIAR Agenda Matrix. The distribution of financial resources is presented as the CGIAR research agenda matrix. Activities are divided into five groups representing the principal undertakings and outputs of the CGIAR. The matrix reflects the full allocation of Center project costs among the CGIAR activities. Projects are the basic units of activity. Approximately 250 projects were ongoing in 2000. The CGIAR has identified and implemented several systemwide programs to respond to specific challenges and strengthen collaboration among Centers and with partners.

Implementation. Centers implement the research agenda in partnership with advanced institutions, NGOs, and NARS. These joint ventures might involve shared tasks at different points on the research and development continuum, from laboratory-based research to field-level experimentation. Funding of such ventures is included in financing for the CGIAR research agenda.

2000 CGIAR Funding

CGIAR CONTRIBUTIONS

In the year 2000 CGIAR Members contributed \$331 million in support of the research agenda (see box 2 on page 32). This figure represents a decrease of \$9 million (3 percent) from the approved financing plan target of \$340 million. It also represents an increase of \$1 million (0.3 percent) from actual support of \$330 million in 1999.

Figure 1 shows CGIAR funding from 1996 to 2000. Annex 2 presents details of Members' support as well as individual receipts by Center. Annex table A2.1 ranks CGIAR contributions by Member to the research agenda for the period from 1997 to 2000. Annex table A2.2 presents 2000 CGIAR funding by Member (both unrestricted support and restricted support). Annex table A2.3 presents the amount of funds provided by each Member to each Center in support of their approved programs.

EVOLUTION OF 2000 SUPPORT TO THE APPROVED RESEARCH AGENDA

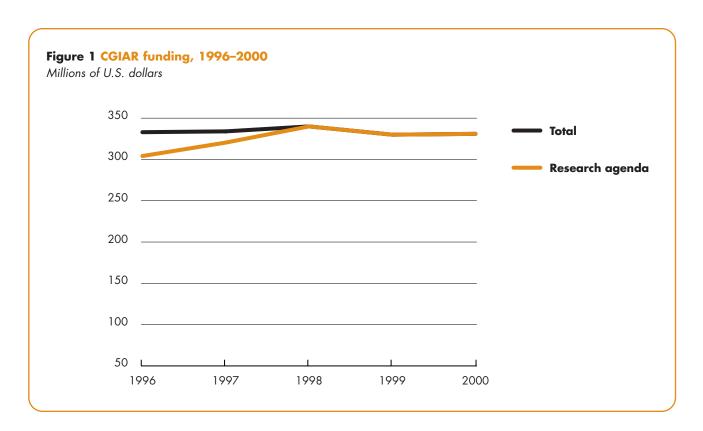
At the ICW in October 1999, the Finance Committee recommended, and the CGIAR approved, a financing plan of \$340

million for 2000. The CGIAR emphasized that the \$340 million was not a ceiling and encouraged Members to allocate additional support if possible. On the other hand, it urged Centers to exercise caution in spending, and to plan on the basis of identified funding.

By the MTM in May 2000, updates from Centers indicated that funding for the research agenda, at the aggregate level, would be at about \$352 million. However, the financing plan was maintained at the \$340 million level because of concerns about funding risks arising from weak European currencies.

At ICW99, the Centers reconfirmed that aggregate funding would be in the \$340 million range. Funding from individual Members continued to be in line with earlier expectations. However, weaker European currencies reduced the dollar value of contributions; consequently the actual 2000 results were likely to be in the range of \$330 million to \$335 million.

At the Center level, 14 Centers were expecting to receive funding equaling or exceeding that specified in their financing plans. Two Centers—ISNAR and ILRI—were projecting funding to be 12 percent and 5 percent, respectively, less than that specified in their approved financing plans. It was noted



that disbursements by Members were running behind schedule. The Finance Committee and the group of Centers urged Members to accelerate disbursements of funds to Centers.

OVERALL FINANCIAL OUTCOME

Member funding of \$331 million, Center-generated income of \$14 million, and extraordinary funding of \$5 million totaled \$350 million in funding to Centers. Total expenditures in 2000, including expenditures on CGIAR Committees but excluding CGIAR Secretariat and TAC expenditures, were \$338 million. Therefore, the operating surplus for Centers as a whole was \$12 million. This surplus, however, incorporates a transfer of \$2 million from CGIAR systemwide reserves and an advance of \$3 million on 2001 income. By comparison, the CGIAR had an operating deficit of \$7 million in 1999.

In 2000, 14 Centers had operating surpluses: IRRI (\$2.7 million), ICLARM (\$2.4 million), IPGRI (\$1.9 million), ICRAF (\$1.6 million), CIAT (\$1.2 million), IFPRI (\$1.1 million), CIP (\$0.9 million), ISNAR (\$0.8 million), IWMI (\$0.3 million), ICARDA (\$0.3 million), ICRISAT (\$0.2 million), CIFOR (\$0.2 million), CIMMYT (\$0.2 million), and IITA (\$0.2 million).

Two Centers had operating deficits: ILRI (\$1.6 million) and WARDA (\$0.6 million). The ILRI deficit represents the reversal of a 1999 surplus that had resulted from a 1999 special allocation (\$1.5 million) from the Finance Committee. This surplus, received and unspent in 1999, was expensed in 2000.

CONTRIBUTION PROFILE

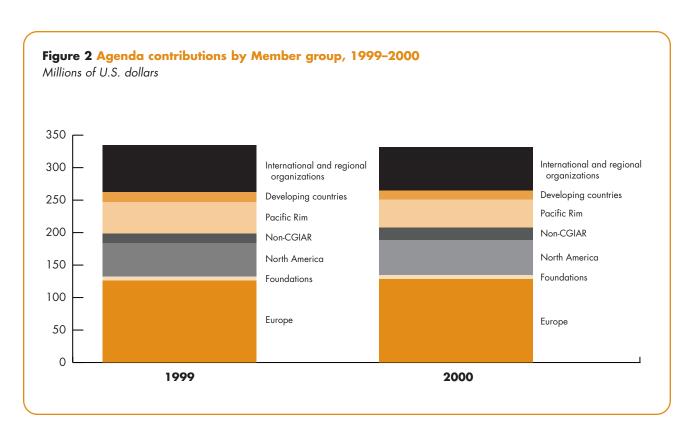
Total CGIAR Membership was 58, of which in 2000 the number of contributing CGIAR Members remained at 55. Uganda was a new contributor in 2000. The average contribution for the CGIAR Membership as a whole remained constant at \$6 million.

The 58 Members can be divided into four groups: industrialized countries (21), developing countries (22), foundations (3), and international and regional organizations (12). For analytical purposes, industrialized countries can be further subdivided along geographical lines into three subgroups: Europe, North America, and the Pacific Rim. Trends associated with any of the groups should not be interpreted as policy decisions by the groups, because contributions to the CGIAR are voluntary, and each Member decides the amount and recipients of its contributions.

Figure 2 compares the composition of funding for 2000 with that for 1999. Figure 3 presents the composition of funding by Center and Member group in 2000.

Overall funding rose by \$1 million (0.3 percent) from 1999. The \$1 million funding increase comprises \$2.5 million from Europe, \$1.8 million from North America, and \$4.2 million from other donors, which were offset in part by decreases of \$4.9 million from the Pacific Rim, \$1.4 million from international and regional organizations, and \$1 million from developing countries.

Europe's share of contributions—\$128 million—remained constant at 39 percent of total funding in 2000. Contributions



were higher in national currency terms, in the aggregate, as the European Commission resumed its funding. However, these increases did not result in higher dollar contributions because of the devaluation of the euro against the dollar during 2000.

Within the European group there was a large increase in European Commission funding (\$16.3 million) over 1999. Other increases were received from the Netherlands (\$2.1 million) and from the United Kingdom (\$1 million). These increases were offset in part by decreases from Germany (\$5.3 million), Switzerland (\$4.5 million), Denmark (\$3 million), Belgium (\$2.1 million), and Sweden (\$0.9 million). Many of the decreases in European Member funding reflect not only large exchange losses but also the timing of the flow of funds for restricted projects. The decrease in funding from Germany reflects a reduction of 50 percent of unrestricted funding (\$3 million) from that country.

North America's contributions increased marginally by \$1.8 million to \$53.5 million, and its share of total contributions remained at 16 percent.

The decrease in contributions from the Pacific Rim, down from \$48 million in 1999 to \$44 million in 2000, reflects a decrease of \$5 million from Japan and a small increase of \$0.5 million from Australia and New Zealand. The fall in Japan's contribution resulted from a reduction in funding of 3 percent (\$1 million) and an exchange loss (\$4 million) following the devaluation of the yen against the U.S. dollar. Contributions from Australia and New Zealand—\$8.5 million

lion and \$0.5 million, respectively—increased by 0.4 million and \$0.1 million respectively from 1999.

Following the pattern of the last several years, developing countries together accounted for 4 percent of Member contributions. Total contributions from these countries decreased from \$14.7 million (4.3 percent) in 1999 to \$13.7 million (4.1 percent) in 2000, a decrease of \$1 million (6 percent). Colombia maintained its position as the largest contributor among the developing countries for the fifth year in a row with its contribution in 2000 of \$2.3 million. Uganda made a first-time contribution of \$0.3 million. Mexico maintained its support at \$1.8 million, and Nigeria contributed \$1 million, down from \$1.6 million in 1999. China increased its support from \$0.7 million to \$1 million, and South Africa increased its support by \$0.1 million to \$0.6 million.

Contributions from international organizations decreased by \$1.4 million to \$66.3 million. Decreases in funding were received from the International Fund for Agricultural Development (IFAD) (down \$1.1 million), African Development Bank (AFDB) (down \$1.1 million), International Development Research Centre (IDRC) (down \$0.7 million), the Arab Fund (down \$0.2 million), and the United Nations Development Programme (UNDP) (down \$0.3 million). These decreases were offset in part by an increase in funding from the Asian Development Bank (ADB) (up \$1.6 million). Among international organizations the World Bank remained the largest investor in the CGIAR, at \$45 million.

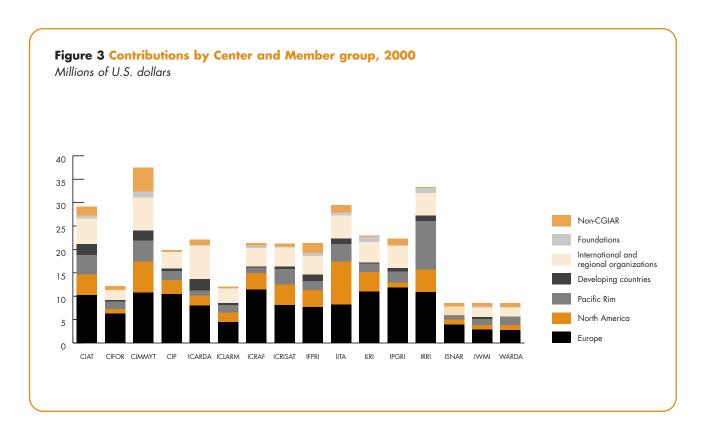


Table 2 Contributions by Other Donors, 1999 and 2000

(millions of U.S. dollars)

	1999	2000
CGIAR Members		
Multidonor projects	3.7	4.7
Non-CGIAR Members		
Foundations	3.0	4.4
Non-Member developing countries	2.2	2.7
Private sector	1.3	2.1
Common fund for commodities	1.3	1.0
NGOs/UN organizations	1.0	1.3
Other miscellaneous	2.5	3.0
Subtotal	11.3	14.5
Total	15.0	19.2

Note: "Other" includes miscellaneous funding from a wide variety of sources.

With contributions of \$6 million and \$5.8 respectively, the ADB and the IFAD were the second and third largest investors in this category. With the exception of contributions from the World Bank, all contributions from international organizations are restricted. The year-to-year funding fluctuations reflect changing start and finish dates for restricted projects.

Contributions from other donors increased by \$4.2 million, from \$15 million in 1999 to \$19.2 million in 2000, and now make up 5.8 percent of the total funding. Table 2 indicates the contributions of these donors in 1999 and 2000.

Multidonor projects are multiyear projects funded by a number of donors, all of whom are Members of the CGIAR. Contributions from individual donors cannot be separately identified in any given year. These contributions account for almost 25 percent of the increase (\$1 million) of \$4.2 million in funding from other donors.

Contributions from foundations include contributions from Nippon, Novartis, Sasakawa, Neys-van Hoogs, Gatsby, Hilton, and the MacArthur Foundation.

Non-Member country contributions include contributions from Bolivia, Honduras, Malawi, Mozambique, Turkey, Nicaragua, Ethiopia, Eritrea, and the Republic of Yemen. They are largely funded by loans or credits, or both, from the World Bank.

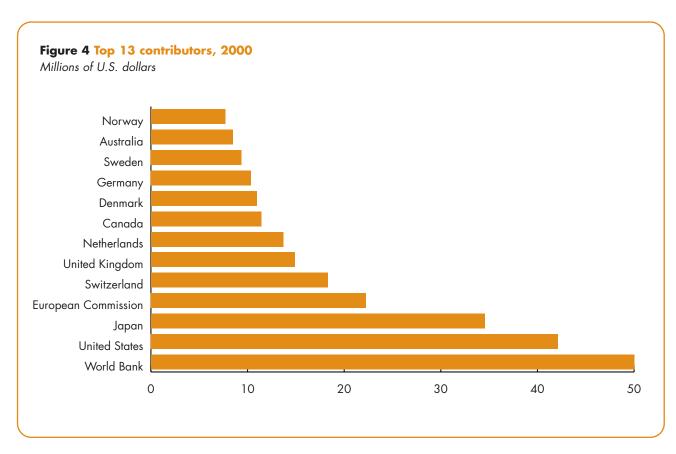
Private sector contributions primarily include contributions, for collaborative work, from Latin American agricultural producers.

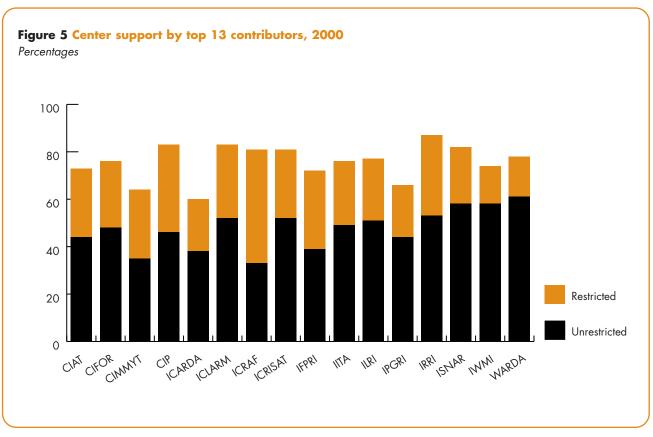
Other miscellaneous contributions include contributions from a wide variety of organizations, including the International Tropical Timber Organization, the International Institute of Biological Control, and the European Environmental Agency.

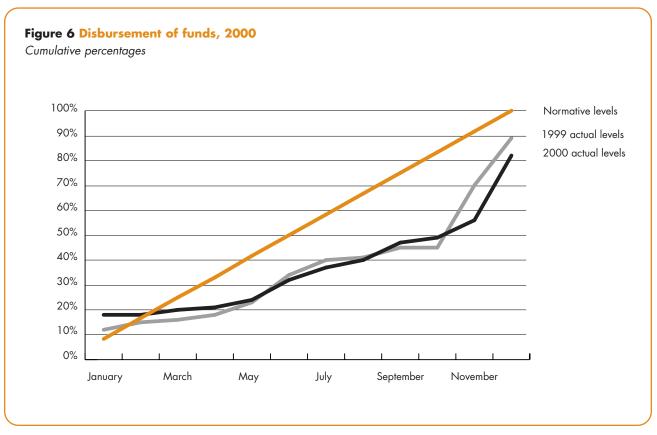
In 2000, 75 percent of the CGIAR's total funding was again provided by the top 13 contributors to the CGIAR. These same 13 Members also contributed 92 percent of the CGIAR total unrestricted funding. Figure 4 illustrates the level of their support. The resumption of EC funding brought the EC back into the top 13. Figure 5 illustrates support by these top 13 contributors as a percentage of Center total funding.

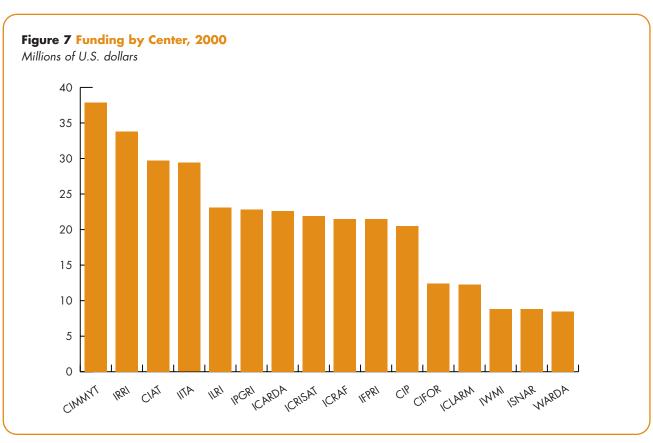
DISBURSEMENTS

The pace of disbursement continues to present a challenge to the Centers' cash flow. Figure 6 compares Member disbursements in 1999 and 2000 with a normative pattern of monthly expenditures. By the end of 2000, only 82 percent of funds had been disbursed, compared with 89 percent in 1999. Dollar receipts decreased from \$293 million in 1999 to \$271 million in 2000 as more than \$60 million was unpaid as of









December 31, 2000. At year-end, therefore, Centers were "owed" more than \$60 million by CGIAR Members.

The primary reasons for continuation in 2000 of the poor disbursement situation were increasing delays in the timing of disbursements by some of the major contributors and the funding on a reimbursable basis of some targeted grants (as targeted funding increases as a percentage of total funding, the associated disbursement of funds will decelerate).

The third quarter of the year continues to be a time when cash flow problems are most acute. In this quarter Centers are forced to call on their reserves to cover almost 40 percent of their annual expenditures. Annex tables A2.4a and A2.4b detail the disbursements in 2000.

CGIAR Members have the option to disburse their contributions either directly to the Centers or through the Secretariat using the World Bank's payment system. In 2000 approximately \$70 million (21 percent of total contributions) was disbursed through the World Bank's payment system. In the last few years, the number of Members using this system has more than doubled from 6 to 14, as has the amount disbursed (from \$24 million in 1994 to \$70 million in 2000), excluding the disbursement of the World Bank contribution. The main advantage to Members of using the Bank's payment system is a reduction in the number of financial transactions:

Members make only one transfer to the World Bank account instead of as many as 16 to various Centers' bank accounts. Beginning in 2000, Centers enter into formal contractual agreements with the World Bank concerning the use of the funds disbursed. This is to ensure full accountability. Annex table A2.4b illustrates Member disbursements through the World Bank in 1999 and 2000.

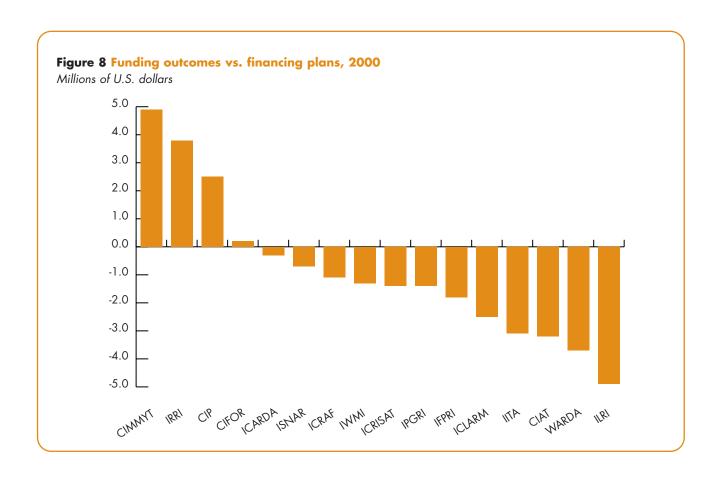
In addition to Member contributions, the Secretariat also manages the disbursement of the World Bank's contributions.

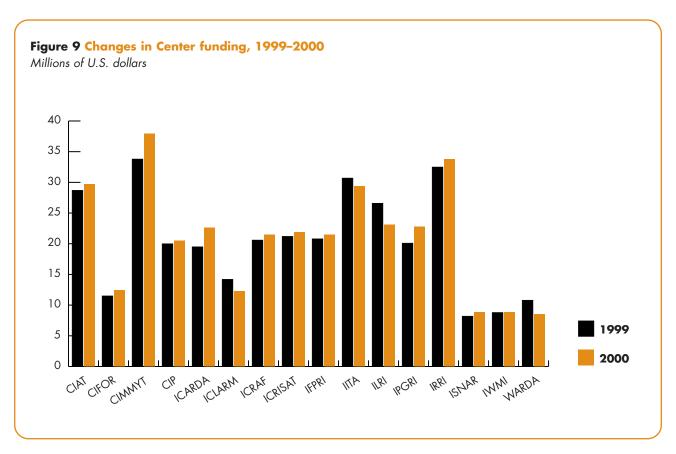
CENTER PERSPECTIVE

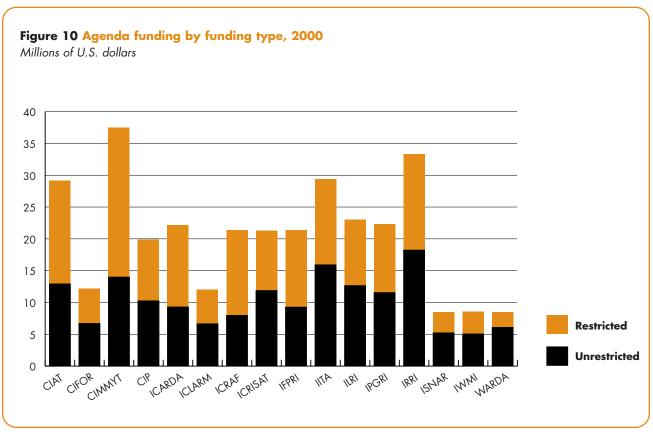
Figure 7 illustrates the distribution of funding by Center, in 2000. In that year CIMMYT was the recipient of the largest amount of funding; followed by IRRI. Each of these Centers had funding in excess of \$30 million. With \$8.5 million, WARDA was the recipient of the smallest amount of agenda funding.

Funding for four Centers was at or above levels approved at ICW99: CIMMYT, \$4.9 million (up 15 percent); IRRI, \$3.8 million (up 13 percent); CIP, \$2.5 million (up 14 percent); and CIFOR, \$0.2 million (up 2 percent).

Funding for eight Centers was within 10 percent of, and thus broadly in line with, financing plan targets: ICARDA, \$0.3 million (down 1 percent); ICRAF, \$1.1 million (down 5 percent);







ICRISAT, \$1.4 million (down 6 percent); IPGRI, \$1.4 million (down 6 percent); ISNAR, \$0.7 million, (down 7 percent); IFPRI, \$1.8 million (down 8 percent); CIAT, \$3.2 million (down 10 percent); and IITA \$3.1 million (down 10 percent).

Funding for the four remaining Centers was 10 percent or more outside their financing plan targets: IWMI, \$1.3 million (down 13 percent); ICLARM, \$2.5 million (down 17 percent); ILRI, \$4.9 million (down 17 percent), and WARDA, \$3.7 million (down 31 percent). These shortfalls primarily reflect lower-than-expected funding from other CGIAR investors and slower-than-planned project implementation.

Figure 8 compares the actual funding received by Centers with their approved funding plans, revealing excesses and shortfalls.

As figure 9 shows, 11 of the Centers received greater funding in 2000 than in 1999: CIMMYT, \$4.1 million (up 12 percent); ICARDA, \$3.1 million (up 16 percent); IPGRI, \$2.7 million (up 13 percent); IRRI, \$1.3 million (up 4 percent; CIAT, \$1.0 million (up 3 percent); CIFOR, \$0.9 million (up 8 percent); ICRAF, \$0.9 million (up 4 percent); ICRISAT, \$0.7 million (up 4 percent); ISNAR, \$0.6 million (up 7 percent); and CIP, \$0.5 million (up 2 percent). IWMI funding remained constant at \$8.8 million.

Four Centers received less funding than that received in 1999: IITA, \$1.3 million (down 4 percent); ICLARM, \$1.9 million (down 14 percent); WARDA, \$2.3 million (down 21 percent); and ILRI, \$3.5 million (down 13 percent).

Annex table A2.5 details 2000 funding by Center. Annex table A2.6 presents 2000 funding outcomes by Center. Annex table A2.7 shows CGIAR System grants by Center from 1996 to 2000.

FUNDING MODALITIES

Analysis of categories and types of funding provides another perspective on the challenges faced by Centers in undertaking the approved agenda (see Financing Modalities in box 2 on page 32).

Depending on the degree of flexibility in its use, CGIAR funding has been traditionally divided into two broad categories: unrestricted support and restricted support, which is targeted to a specific program, project, subproject, or activity.

UNRESTRICTED SUPPORT

Unrestricted support refers to unrestricted funds to support the Center as a whole. World Bank contributions are the best example of this type of funding because, within the research agenda, allocation of the contribution is totally unconstrained. Centers can allocate unrestricted funds to any program or cost within the research agenda on the basis of institutional needs and priorities.

RESTRICTED SUPPORT

There are two types of restricted support. The first is restricted support by attribution, which refers to funds for a program or region. Use of these funds within a program or region is unconstrained, but Centers are required to document their allocation. France, the United Kingdom, and the EC have given restricted support by attribution.

The second type of restricted support is restricted support by contract, which refers to funds that must be expended in accordance with a contract between a Member and the Center implementing the project, subproject, or activity. Funds for each line item in the budget are specified. Any reallocation of funds within the budget generally requires the prior consent of the Member. Accountability is detailed in the contract, which often requires financial audits on a periodic (annual) or end-of-project basis. Some Members' support is restricted support by contract.

In 2000, unrestricted support was 50 percent (\$164 million) of total support, down from 54 percent in 1999 (see figure 10). Restricted support (by attribution and by contract) was 50 percent of total support, up from 46 percent in 1999. In absolute terms, this support was \$167 million (\$15 million more than in 1999).

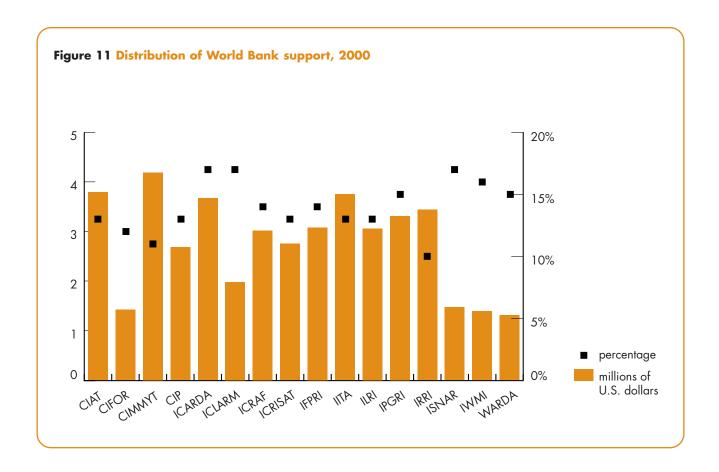
CO-SPONSOR SUPPORT

The World Bank contributed \$45 million to the CGIAR research agenda in 2000. Bank support amounted to 14 percent of total CGIAR research support. In addition, the Bank funded the annual operating costs of the CGIAR Secretariat (\$4.25 million) and contributed \$0.75 million to TAC. The Bank's total support, therefore, amounted to \$50 million in 2000, the same as in 1999. FAO provided \$0.6 million in support of TAC/SPIA and \$0.2 million directly to Centers. UNDP provided \$0.4 million in support of TAC/SPIA and \$1.8 million directly to Centers.

WORLD BANK SUPPORT

Following the procedure established at ICW98, the Finance Committee allocated the Bank's 2000 contribution at a 12 percent matching rate and authorized its disbursement. The first tranche of \$33.45 million representing 90 percent of the total matching allocation of \$37.25 million, was disbursed to Centers in January 2000. The second tranche of \$3.8 million was disbursed to Centers in June.

The amount of \$3.3 million was allocated to Centers for systemwide programs as follows: ICRAF (\$0.6 million, ASB), IITA (\$0.3 million, IPM), IPGRI (\$0.6 million, SGRP), CIM-MYT (\$0.25 million, tropical maize station), ICARDA (\$1 million, Central Asia program), IFPRI/ISNAR, (\$0.3 million, indicators project), and IFPRI (\$0.25 million, SPIA/TAC poverty project). In addition, other allocation to Centers in



the amount of \$0.8 million included \$0.5 million to CIP (downsizing program), and \$0.25 to CIMMYT (rice/wheat facilitation unit). The Finance Committee also allocated \$0.75 million to support CGIAR Committees.

At the MTM the Finance Committee allocated the remaining \$3 million of the 2000 contribution, together with an additional \$5 million, to Centers to better enable them to cope with the 1999 EC default. The additional \$5 million was funded with an advance of \$3 million from the 2001 World Bank allocation and a drawdown of \$2 million from CGIAR reserves. Table 3 represents the total allocation of World Bank funding in 2000.

For 1998-2000, the initial allocation of World Bank matching funds was 11 percent. For 1999 the Finance Committee increased this percentage to 11.5 percent. For 2000, matching was increased to 12 percent. Figure 11 illustrates the actual distribution of total 2000 World Bank support and the percentage of total agenda Center funding that it represented in 2000. In 2000, all 16 Centers received Bank support, ranging from 11 percent to 17 percent of total agenda contributions. Annex table A2.8 presents data on Bank support for the period from 1996 to 2000.

CGIAR reserves at the beginning of 2000 were \$4.5 million. During the year, \$2 million were used as part of the EC rescue package.

Table 3 Allocation of World Bank Funding, 1999–2000

(millions of U.S. dollars)

World Bank Funding	1999	2000
Matching funds 12 percent	34.6	37.3
Systemwide programs	4.0	3.3
Support to CGIAR strategic initiatives	1.5	0.0
Other Center allocations	3.5	3.8
Support to CGIAR committees/reserves	1.5	0.7
TOTAL	45.0	45.0
TOTAL	45.0	45.0

Agenda Resources

pending on agenda programs in 2000 amounted to \$338 million, a decrease of \$9 million or 3 percent over spending in 1999 (\$347 million). Four Centers (CIFOR, ICRISAT, ILRI, and IWMI) had expenditures in line with 1999. The agenda expenditures of another four Centers were higher in 2000 than in 1999. These Centers were CIMMYT (\$1.6 million, up 4 percent), IFPRI (\$1.1 million, up 5 percent), IPGRI (\$1.1 million, up 5 percent), and ICARDA (\$0.6 million, up 3 percent).

Expenditures at eight Centers were lower in 2000 than in 1999. The Centers with the most significant decreases in agenda expenditures were IITA (\$2.6 million, down 8 percent), IRRI (\$2.5 million, down 7 per cent), ICLARM (\$2.0 million, down 16 percent), ISNAR (\$1.5 million, down 16 percent), WARDA (\$1.5 million, down 14 percent), CIP (\$1.4 million, down 7 percent), CIAT (\$1.2 million, down 4 percent) and ICRAF (\$1.1 million, down 5 percent). In most of the cases in which expenditures were lower it was because of the successful completion of some restricted funded projects and delays in starting new projects.

ALLOCATION OF RESOURCES

The allocation of resources is reviewed below from the perspective of undertaking, region, and object of expenditure. Annex 3 presents expenditure data. Annex table A3.1 provides data on investments by Center from 1996 to 2000. A new classification scheme based on an overall CGIAR logical framework has been introduced in 2000. This scheme will replace the current classification by undertaking with outputs.

BY UNDERTAKING

Figure 12a illustrates investments in the year 2000 in the CGIAR's five principal undertakings: increasing productivity, protecting the environment, saving biodiversity, improving policies, and strengthening NARS. Annex table A3.2 provides details for the 1996–2000 period.

Investments in the five CGIAR undertakings by Center are presented in figures 12b, 12c, 12d, 12e, and 12f. Annex table A3.3 provides details.

Efforts to increase productivity continued to be the major thrust of CGIAR activities (see figure 12b). Investments in these efforts totaled \$120 million (36 percent of total investment), up from \$117 million (34 percent of total investment) in 1999. Among productivity investments, investments in germplasm enhancement increased marginally (from \$61.2) million to \$61.8). Investments in production systems development and management increased from \$56.1 million to

\$57.9 million. Crops accounted for 71 percent of investments, livestock for 13 percent, forestry for 12 percent, and fisheries for 4 percent.

Investments in efforts to protect the environment (see figure 12c) decreased in dollar terms (from \$67.9 million to \$60.4 million) and percentage terms (from 20 percent to 18 percent).

Investments in efforts to save biodiversity (see figure 12d) decreased in dollar terms (from \$36.2 million to \$34.8 million) but remained the same in percentage terms at 10 per-

Investments in improvement of policies (see figure 12e) increased in dollar terms (from \$46.8 million to \$48 million) and percentage terms (from 13 percent to 14 percent).

Investments in efforts to strengthen NARS (see figure 12f) decreased in dollar terms (from \$78.6 million to \$74.6 million) and percentage terms (from 23 percent to 22 percent). Distribution of these investments among training, organization and management counseling, and other programs changed little from previous years.

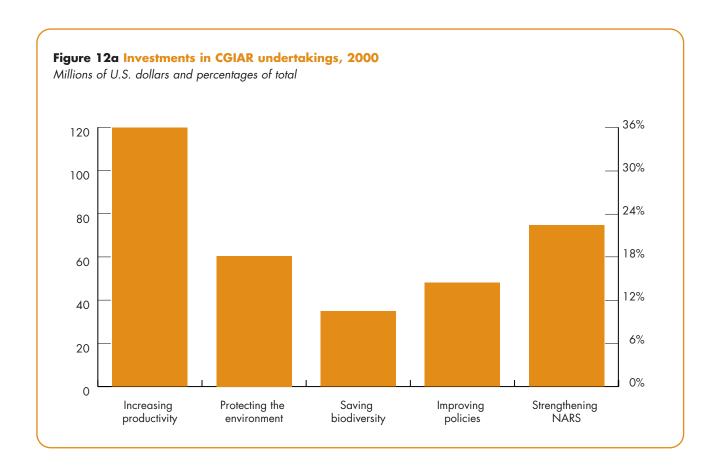
BY REGION

Figure 13 presents the 2000 allocation of CGIAR resources by developing regions. Investment in Sub-Saharan Africa remained at 42 percent (\$140 million) of total investment in 2000. Investment in Asia remained at 32 percent (\$110 million). Investment in Latin America and the Caribbean decreased from 18 percent to 17 percent (\$56 million), and investment in West Asia and North Africa decreased from 10 percent to 9 percent (\$31 million).

All Centers invested in programs for Sub-Saharan Africa in 2000. Seven Centers—IITA, ILRI, ICRAF, CIMMYT, WARDA, IFPRI, and ICRISAT—accounted for more than 75 percent of allocations to this region. The pattern was similar in Asia. A majority of the Centers invested in programs for Asia. Four Centers—IRRI, ICRISAT, CIMMYT, and CIP accounted for the majority of allocations to this region. About half of the allocations for WANA continued to be made by ICARDA. CIAT accounted for more than one-third of the allocations made in Latin America and the Caribbean.

BY OBJECT OF EXPENDITURE

The trend of reduced personnel spending continued in 2000. As figure 14 indicates, personnel costs amounted to 49 percent of total 2000 costs, a decrease of only 1 percent from 1999 but a significant decrease from the mid-1990s, when personnel expenditures accounted for 55 percent of total annual costs. From 1999 to 2000, expenditures on supplies



and services increased from 38 percent to 39 percent of total expenditures. Travel and depreciation expenditures remained constant at 7 percent and 5 percent, respectively. In absolute terms, supply and service expenditures remained at \$133 million, personnel expenditures decreased by \$9 million (5 percent), depreciation expenditures decreased by \$2 million (10 percent), and travel expenditures increased marginally by \$1 million to \$25 million. Annex table A3.5 provides detailed Center-level information on object expenditures. Annex table A3.6 presents data on CGIAR staffing from 1996 to 2000.

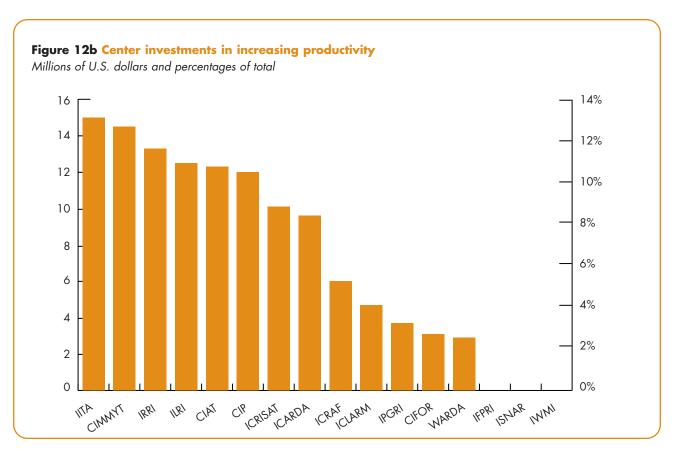
COST CHANGES

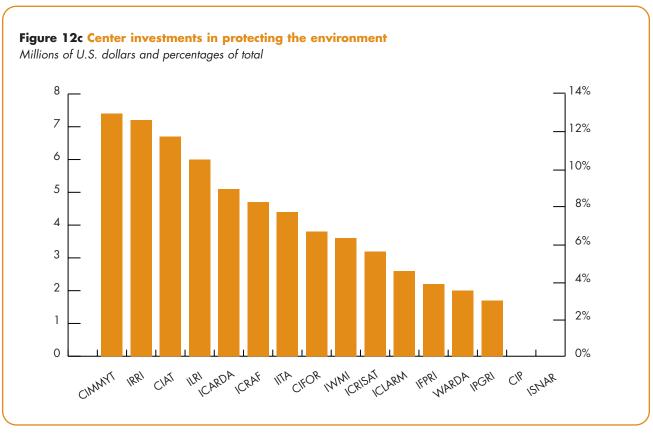
The costs at Centers are affected by both inflation and fluctuations in currency values—the relationship between the exchange rates of expenditure currencies and the U.S. dollar, the CGIAR's unit of account. An aggregate CGIAR cost

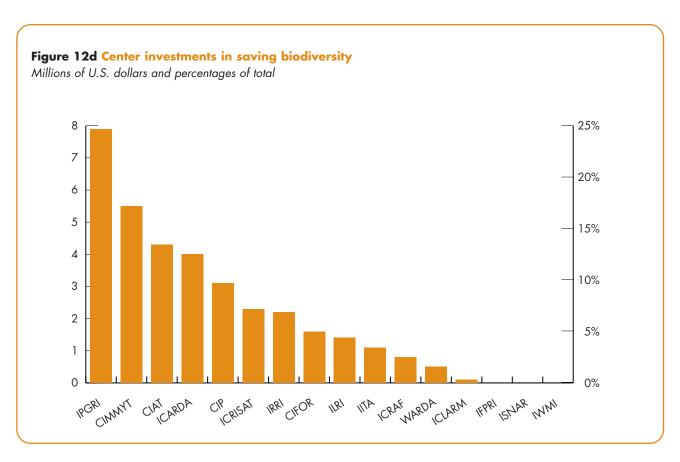
increase index in dollar terms can be established with data on the proportion of expenditures in various currencies and data on the annual exchange rates of currencies reported by the International Monetary Fund (IMF). In 2000, the loss of Centers' purchasing power was 0.3 percent, compared with 0.2 percent in 1999. Annex table A3.7 presents data on the Centers' inflation rates from 1996 to 2000.

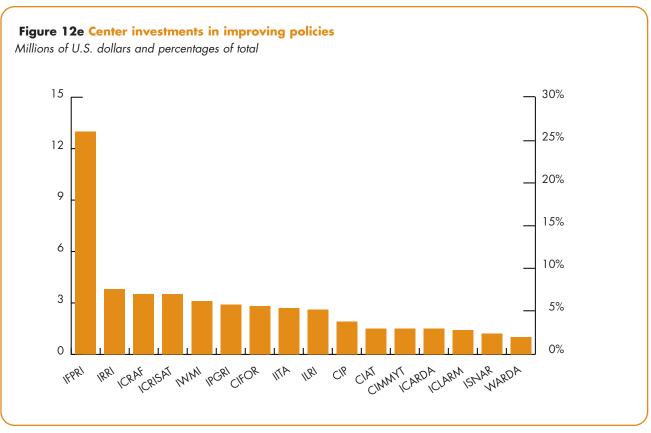
CGIAR INVESTMENTS OVER 29 YEARS

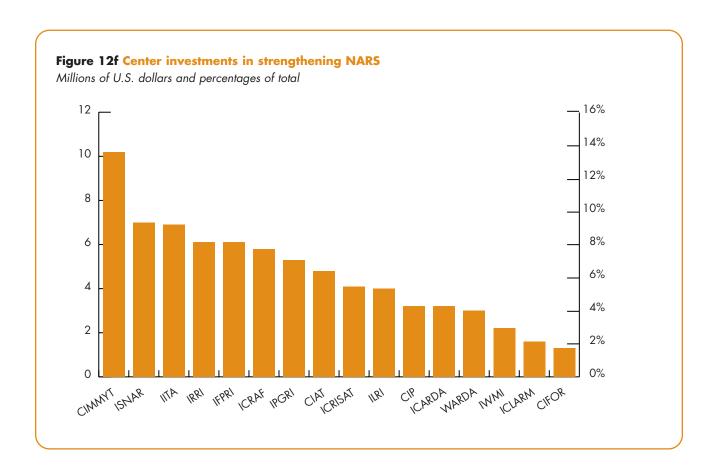
To analyze CGIAR activity from the perspective of the record of expenditures (investment), the CGIAR Secretariat organized all available Center data on resource use from 1972 to 2000. Annex table A5.1 summarizes all CGIAR investments. The table shows investments in five-year periods and for 1997 to 2000 by Center, undertaking, commodity group and production sector, region, and object of expenditure.

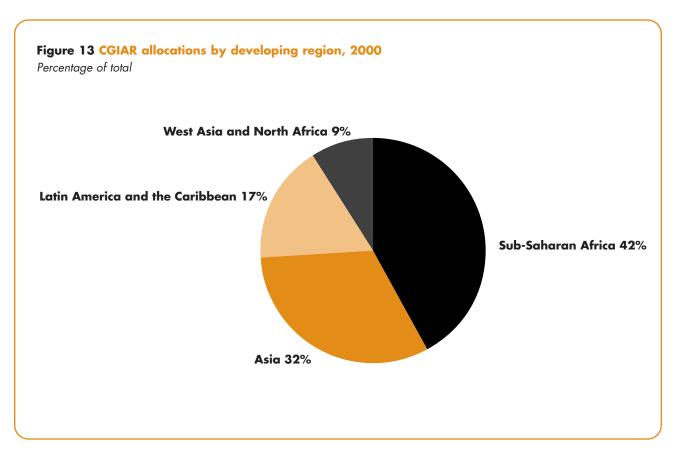


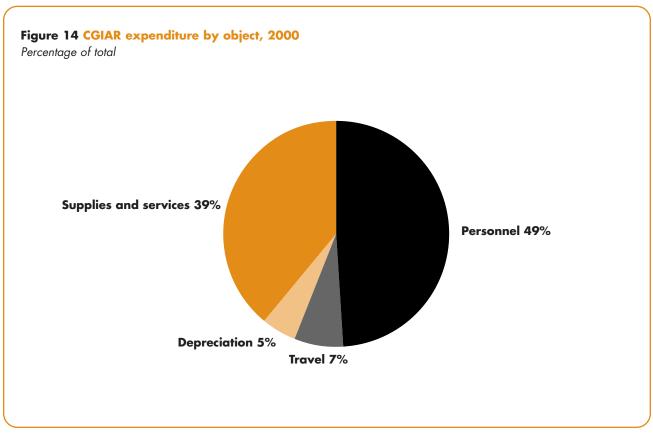












Financial Position

he aggregation of 1996-2000 Center data, shown in table 4 and elaborated below, reflects the financial position of the CGIAR System. Annex table A4.1 provides details by Center.

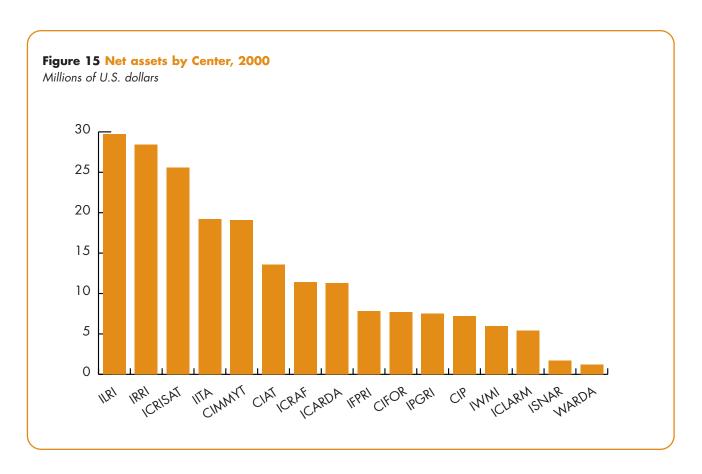
The 2000 financial data confirm that the CGIAR as a whole is in a strong financial condition. Total net assets at the end of 2000 were \$203 million (1999: \$263 million). These assets are made up of \$62 million (1999: \$44 million) in unappropriated net assets and \$141 million (1999: \$219 million) in appropriated net assets. Cash and cash-equivalent balances totaled \$177 million at the end of 2000 (1999: \$212 million). This figure includes \$26 million in cash and investments disclosed under long-term assets.

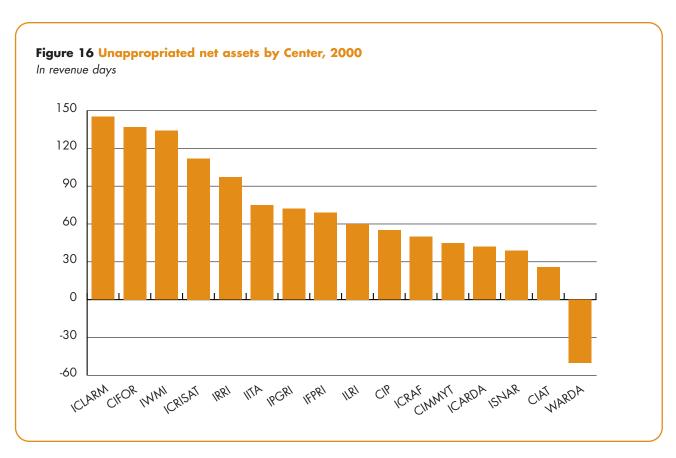
NET ASSETS

Net assets are the residual interest in an entity's assets after liabilities have been deducted. Hence, net assets in not-forprofit organizations are equivalent to "shareholder equity" in for-profit organizations. The CGIAR introduced two changes in accounting for net assets during 1999/2000.

The first accounting change, introduced in 1999, concerns accounting for land and buildings, which revert to the host government of a Center should a Center cease operations. The new policy states that land and buildings do not have a residual value and should be written out of a Center's books of account. Centers will no longer annually depreciate such land and buildings but will instead carry them in their balance sheets at a fully written-down value of zero. As a result, Centers' annual depreciation charges and total net assets will decrease. The new policy, which was implemented by some Centers (ICARDA, ICLARM, and ICRISAT) in 1999, was implemented by most of the remaining Centers during 2000. The net effect of the policy in 2000 was to reduce investments in fixed assets (and, by implication, in net assets) by \$75 million.

The second accounting change was to reclassify net assets as either unappropriated (broadly corresponding to the earlier term "operating funds") or appropriated (broadly corresponding to the earlier term "capital invested in fixed assets plus capital funds"). This change was initiated to bring





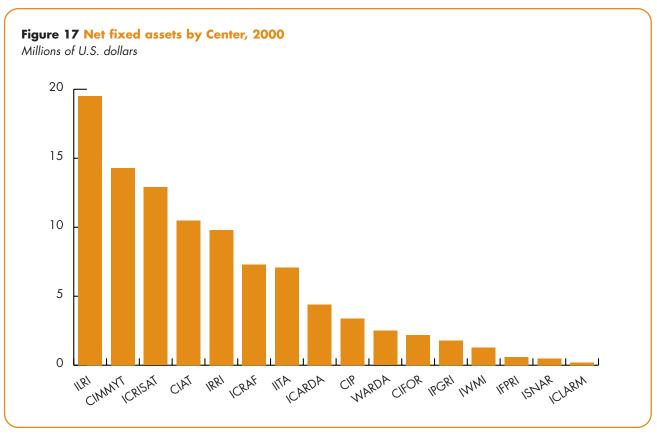


Table 4 CGIAR System Financial Position, 1996–2000 (thousands of U.S. dollars)

	1996	1997	1998	1999	2000
Assets					
Current assets					
Cash and cash equivalents	1 <i>74</i> ,391	146,767	1 <i>7</i> 1,110	212,347	151,327
Accounts receivable:					
Donors	46,060	72,261	65,965	54,062	60,823
Employees	2,339	2,662	2,699	2,591	3,499
Others	16,293	13,506	13,154	12,656	13 <i>,</i> 576
Inventories	9,224	8,811	7,257	6,653	6,506
Pre-paid expenses	4,180	3,811	2,786	3,398	3,069
Other current assets	5,342	2,988	3,247	4,549	5,248
Total current assets	257,829	250,806	266,218	296,256	244,048
Fixed assets					
Property, plant, and equipment	448,840	467,865	475,861	399,398	289,339
Less: Accumulated depreciation	217,119	237,148	248,819	225,702	191,265
Total fixed assets (net)	231,721	230,717	227,042	173,696	98,074
Other assets					25,728
Total assets	489,550	481,523	493,260	469,952	367,850
Liabilities					
Current liabilities					
Bank indebtedness	1,280	928	1,444	3,649	204
Accounts payable:	1,200	720	1,444	0,047	204
Donors	66,376	72,194	67,200	100,576	56,658
Employees	21,547	4,673	8,971	9,876	5,369
Others	28,441	24,208	17,824	21,871	25,966
In-trust accounts	5,448	1,107	1,732	3,457	3,634
Accruals and provisions	42,689	43,863	50,054	43,855	48,259
Total current liabilities	166,249	146,973	147,225	183,284	140,090
Long-term liabilities	100,247	140,773	147,223	103,204	140,070
Long-term loan	811	1,617	190	0	0
Other	554	17,064	22,915	23,453	24,899
Total long-term liabilities	1,365	18,681	23,105	23,453	24,899
Total liabilities	167,614	165,654	170,330	206,737	164,989
Total assets less total liabilities		· ·	322,930	263,215	
lordi assers less fordi liadilities	321,936	315,869	322,930	203,213	202,861
Net Assets					
Unappropriated	44,983	43,070	51,522	43,966	61,802
Appropriated	276,953	272,799	271,408	219,249	141,059
Total net assets	321,936	315,869	322,930	263,215	202,861

Note: The decrease in net assets in 2000 is primarily explained by the write-down of \$75 million of fixed assets following a change in accounting policy. The decrease represents a book movement.

CGIAR accounting policies fully into compliance with generally accepted accounting principles (GAAP) for not-for-profit organizations. More details can be found in the CGIAR Financial Guideline Series No. 2: CGIAR Accounting Policies and Reporting Practices Manual.

Following the change in accounting for land and buildings, aggregate net assets fell by \$60.3 million—from \$263.2 million in 1999 to \$202.9 million in 2000. The level of these assets for each Center is shown in figure 15. Unappropriated net assets increased by \$17.8 million in 2000, from \$44 million in 1999 to \$61.8 million. Appropriated net assets fell by \$78.1 million in 2000, from \$219.2 million to \$141.1 million.

UNAPPROPRIATED NET ASSETS

Unappropriated net assets (formerly "the operating fund") are equivalent to "retained earnings" in a business enterprise. In a not-for-profit context, unappropriated net assets indicate the financial capacity of an organization to adjust to unplanned changes in revenue.

At the System level, unappropriated net assets rose by \$17.8 million, from \$44 million in 1999 to \$61.8 million in 2000. When expressed as revenue and revenue days, this increase represents an increase from 46 days in 1999 to 67 days in 2000. This increase is due to two factors. First, the aggregate statement of activity for the System as a whole resulted in an operating surplus of \$12 million for 2000; included in this surplus is a net transfer of \$2 million from system reserves and an advance of \$3 million of 2001 income for EC relief; second, some Centers reclassified \$5 million from the former capital fund as unappropriated. As figure 16 indicates, the majority of Centers continued to have unappropriated net asset days above the CGIAR's average of 67 days. Only one Center, WARDA, had a negative balance at the end of 2000 due to accumulated deficits from earlier years.

APPROPRIATED NET ASSETS

Appropriated net assets fell by \$78 million, from \$219 million in 1999 to \$141 million in 2000. They comprised \$98 million invested in fixed assets and \$43 million set aside by Centers for the acquisition of fixed assets. The capital invested in fixed assets decreased by \$76 million, from \$174 million in 1999 to \$98 million in 2000, largely because of the write-down of \$75 million of assets following the above-noted change in accounting for fixed assets.

NET FIXED ASSETS

The CGIAR's asset base indicates a stable pattern of capital acquisition. In 2000, capital expenditures totaled \$15 million; the annual depreciation charge totaled \$16 million. Annex table A4.2 indicates capital expenditures by Center for the period 1996–2000. Figure 17 illustrates the 2000 year-end levels of net fixed assets for all Centers.

In 2000 CIAT, CIFOR, CIP, IFPRI, IWMI, IITA, IRRI, IPGRI, ISNAR and WARDA introduced the new accounting policy for depreciation on land and buildings. The net result was a reduction (\$75.2 million) in the net fixed assets of CIAT (down \$7.8 million); CIFOR (no change); CIP (down \$6.9 million); IFPRI (no change); IWMI (no change); IITA (down \$22.7 million); IRRI (down \$26.4 million); IPGRI (no change); ISNAR (no change); and WARDA (down \$11.4 million).

CAPITAL PURCHASE FUND

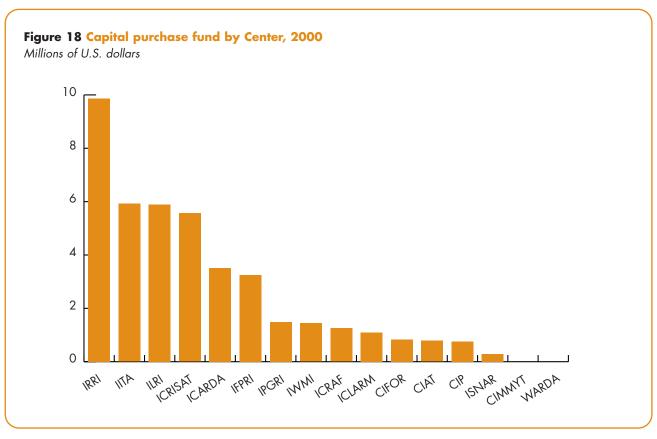
The remaining \$43 million set aside for fixed asset acquisition (formerly called the "capital fund"), is slightly less than the amount set aside in 1999: \$45 million. The decrease is largely accounted for by the redesignation of \$5 million from the capital fund as unappropriated net assets, offset by the excess of the annual depreciation charge for the System as a whole over capital purchases. This part of the fund is established primarily by the setting aside of funds equal to the value of the depreciation charge (so-called funding depreciation). Figure 18 shows the appropriated net assets funds set aside for capital purchase, by Center. With the exception of WARDA and CIMMYT, all Centers had balances at the end of 2000.

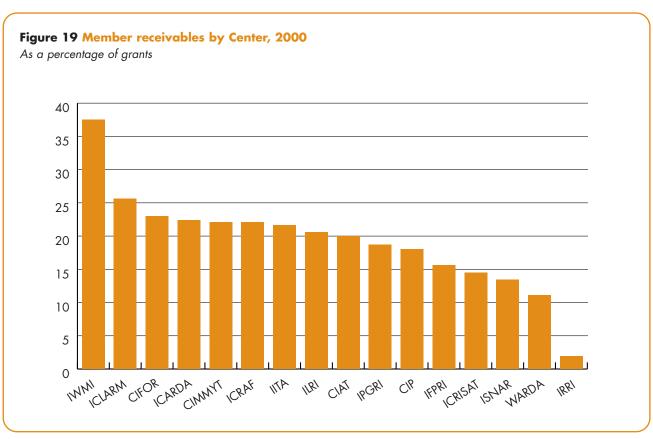
The CGIAR Secretariat and Center financial staff continue to monitor the acquisition rate of assets, including any long-term major infrastructure investments, and the availability of resources. If it becomes apparent that the useful life of fixed assets is longer than previously thought, assumed asset lives conceivably could be increased sufficiently to reduce depreciation costs, with no ill effects on Center operations.

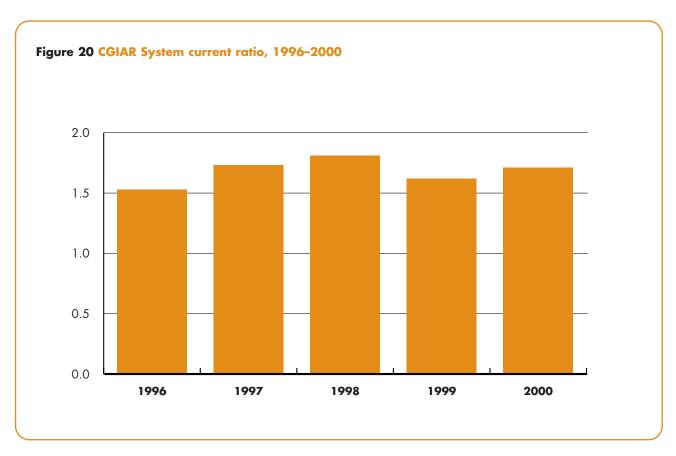
LIQUIDITY

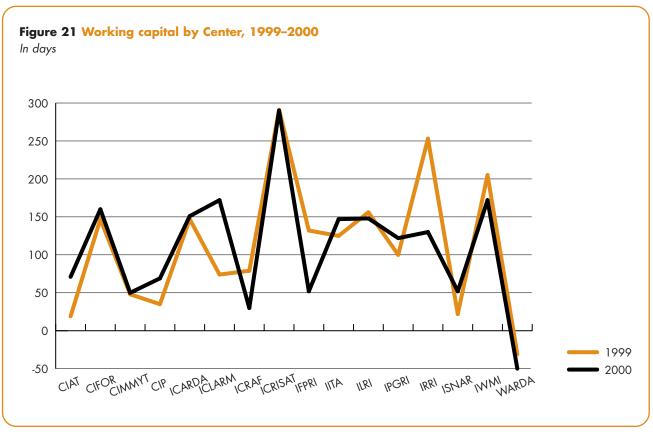
Liquidity represents an organization's ability to meet its short-term spending requirements. Two primary indicators of liquidity are "current ratio" and "working capital." Current ratio is current assets divided by current liabilities, represented as a fraction. This liquidity measure is comparable across organizations, regardless of size, because it is a relative figure. Working capital is the amount by which current assets exceed current liabilities. Because of the different sizes of Centers, absolute numbers are not helpful for comparative purposes. Working capital expressed in terms of future spending requirements is useful for such purposes.

The Centers' liquidity hinges on Members' disbursements, which span the entire calendar year. With few exceptions, Members' progress in making disbursements in the earlier months of the year has not been encouraging. At the end of 2000, 18 percent of the value of 2000 agenda contributions (nearly two months of income) was outstanding as accounts receivable from Members. Figure 19 presents these accounts as a percentage of grants.









CURRENT RATIO

The systemwide current ratio in the CGIAR increased marginally, from 1.64 in 1999 to 1.74 in 2000. The CGIAR's average current ratio is within the normative range. As a general rule of thumb, a current ratio of 1.5 is considered adequate. Five Centers have current ratios of less than 1.5: ICRAF (1.3), IFPRI (1.3), IRRI (1.4), ISNAR (1.4), and WARDA (0.8). If IRRI's investments were considered to be part of current assets, as they were in the past, its current ratio would be 2.0. Figure 20 shows the evolution of the current ratio since 1996.

WORKING CAPITAL

Figure 21 compares working capital expressed as Center spending requirements in days in 1999 and 2000. The 2000 system average of 112 days of expenditure is less than the 1999 system average: 119 days. In all but one Center, the number of working days in 2000 was generally in line with that in 1999. IRRI's average days decreased from 253 days to 130 days, primarily because of a long-term investment of \$12.5 million, which is no longer considered part of working capital. Because of their low level of working capital, ISNAR and WARDA (-50 days) are in need of continued careful cash management.



Compliance with Financial Guidelines

The Centers are independent institutions governed by their respective boards of trustees. In the interest of transparency and consistency in financial practices and the presentation of financial information, the Centers follow financial guidelines issued by the CGIAR Secretariat. These guidelines aim to bring the CGIAR's financial practices into conformity with those generally accepted worldwide. Developed with the input of Center financial personnel, external financial experts, and Secretariat staff, the guidelines are amended as required to reflect changing practices. Guidelines covering accounting policies and the preparation of externally audited annual financial statements are particularly relevant in this regard. The most recent revision of these guidelines took effect in 1999 and brought CGIAR practices up to date with the current practices of not-for-profit organizations.

As part of the annual review of substantive financial performance, Pricewaterhouse Coopers (PwC) has reviewed the externally audited 2000 Center financial statements to ensure compliance with CGIAR policy and reporting guidelines. PwC has confirmed that all Centers comply with existing policy and reporting guidelines and that any departures have resulted in no material misstatements of financial information.

TABLE A1.1 CGIAR CONTRIBUTIONS TO THE APPROVED RESEARCH AGENDA BY MEMBER GROUP, 1972–2000

(millions of U.S. dollars)

Members	1972-76	1977-81	1982-86	1987-91	1992-96	1997	1998	1999	2000	Total
Europe Austria			1.0	5.0	<i>7</i> .1	1.8	2.3	2.3	1.8	21.2
Belgium	3.5	13.7	9.2	14.2	19.9	5.5	6.0	6.8	4.7	83.6
Denmark	1.7	4.7	5.9	14.4	45.0	19.1	1 <i>7.7</i>	14.0	11.0	133.5
European Commission		17.4	28.3	59.0	76.6	23.1	24.9	6.0	22.3	257.5
Finland	1.1	2.1	2.1	21.4	3.9	2.1	2.1 5.9	1.5	1.5	34.6
France Germany	1.1 13.3	3.1 39.1	6.1 36.6	18.3 54.6	21.4 76.2	4.9 16.6	5.9 16.3	5.9 15.5	6.0 10.2	72.8 278.4
Ireland	10.0	0.4	1.9	1.8	3.0	0.8	1.0	0.9	0.8	10.6
Italy	0.1	1.9	29.1	39.8	17.6	4.0	3.0	3.2	3.2	101.9
Luxembourg				0.3	1.0	0.7	0.7	0.7	1.3	4.7
Netherlands	4.1	11.6	20.5	30.7	55.9	14.5	14.7	11.6	13. <i>7</i>	177.3
Norway Portugal	3.3	9.3	11.4	20.6	28.4	7.2 0.3	8.3 0.3	8.9 0.5	7.7 0.4	105.0 1.4
Spain		0.5	2.5	2.5	3.9	1.8	1.1	0.9	1.2	14.4
Sweden	7.2	14.8	16.5	28.0	39.0	<i>7</i> .1	9.3	10.3	9.4	141.6
Switzerland	1.9	9.5	26.6	46.3	63.6	20.9	22.7	22.8	18.3	232.6
United Kingdom	9.0	27.5	32.6	55.8	50.8	10.2	11.5	13.9	14.9	226.2
Subtotal North America	45.1	153.3	230.5	412.7	513.4	140.6	147.6	125.8	128.3	1,897.3
Canada	1 <i>7</i> .3	36.1	48.6	71.0	75.2	12.9	12.3	12.3	11.4	297.2
United States	41.6	128.1	222.0	217.3	183.5	38.3	40.5	39.4	42.1	952.8
Subtotal	58.9	164.2	270.6	288.3	258.7	51.2	52.8	51. <i>7</i>	53.5	1,250.0
Pacific Rim	4.0	10.0	00.5	1 / 7	05.5	, ,	7.0	0.1	0.5	1100
Australia	4.0 2.5	13.3 25.9	20.5 54.7	16. <i>7</i> 104.9	25.5 166.3	6.6 33.5	7.8 35.3	8.1 39.9	8.5 34.6	110.9 497.5
Japan New Zealand	0.1	0.1	0.1	104.9	100.3	33.3	0.4	0.4	0.5	1.6
Subtotal	6.6	39.3	75.3	121.7	191. <i>7</i>	40.0	43.5	48.4	43.5	610.0
Developing and tra	nsition econ	omies								
Bangladesh			1.0	0.0	0.4	0.1	0.1	0.3	0.3	0.8
Brazil China			1.0 1.5	0.2 1.5	0.6 2.5	0.5 0.5	0. <i>7</i> 0.5	0.4 0.7	0.4 1.0	3.2 8.2
Colombia			1.5	1.5	4.5	2.6	2.5	2.7	2.3	14.6
Côte d'Ivoire					0.3	0.2	0.1	0.1	0.1	0.7
Egypt, Arab Republic o	f				1.0	1.1	1.4	1.4	1.4	6.2
India		0.5	2.5	2.5	4.0	0.8	0.8	0.7	0.8	12.7
Indonesia Iran, Islamic Republic o	of 2.0	3.0			1.2 1.9	0.5 1.5	0.1 2.0	0.4 1.8	0.2 1. <i>7</i>	2.5 13.9
Kenya	2.0	3.0			1.7	1.5	0.5	0.4	0.1	1.0
Korea, Republic of				0.5	2.6	0.6	0.9	0.8	0.9	6.3
Mexico		1.4	2.0	0.2	0.6	0.5	0.6	1. <i>7</i>	1.8	8.8
Nigeria	1.3	5.4	4.2	0.5	0.0	0.1	1.0	1.6	1.0	15.0
Pakistan Peru						0.5	0.2 0.4	0.0 0.3	0.2 0.2	0.8 0.9
Philippines		0.7	1.6	1.1	1.7	0.4	0.7	0.3	0.2	6.8
Russian Federation		0.,			0.2	· · ·	0.,	0.0	0	0.2
Saudi Arabia	1.0	1.0	3.0							5.0
South Africa						0.5	0.6	0.5	0.6	2.2
Syrian Arab Republic Thailand						0.5	0.3	0.5 0.1	0.1	0.5 1.0
Uganda						0.5	0.5	0.1	0.3	0.3
Subtotal	4.3	11.9	15.8	6.5	20.6	10.8	13.2	14.7	13.7	111.5
Foundations										
Ford Foundation	16.8	6.2	4.9	4.6	12.9	3.2	3.1	2.6	2.6	57.0
Kellogg Foundation Rockefeller Foundation	1.3 1 <i>7</i> .1	0.6 6.7	1.0 3.5	6.3	0.4 7.7	0.3 2.1	0.3 3.4	0.1 3.5	0.0 4.0	4.0 54.3
Subtotal	35.2	13.5	9.4	11.0	21.0	5.6	6.8	6.2	6.6	115.3
International and re	egional org									
ADB	0.3	1.2		1.0	4.0	1.8	3.8	4.4	6.0	22.5
AFDB		0.1	0.6	5.3	5.6	1.0	0.8	2.3	1.2	17.0
Arab Fund FAO		1.1	1.4	1.9	5.1	1.0 0.3	1.5 0.6	1.9 0.2	1. <i>7</i> 0.2	15. <i>7</i> 1.2
IDB	11.2	32.2	42.6	48.8	25.8	4.5	2.1	1.5	1.4	170.0
IDRC	3.9	5.7	6.5	3.4	4.4	2.4	2.4	3.0	2.3	34.0
IFAD		11.1	24.9	1.9	4.2	3.1	4.0	6.9	5.8	61.9
OPEC Fund UNDP	7.4	2.0 21 <i>.7</i>	9.5 37.0	1.2 38.2	0.8 38.6	0.2 4.5	0.2 3.2	0.2 2.1	0.2 1.8	14.2 154.5
UNEP	0.9	0.5	0.3	0.1	1.2	0.2	0.1	0.2	0.7	4.2
World Bank	16.1	53.3	116.1	162.8	222.5	45.0	45.0	45.0	45.0	750.8
Subtotal	39.9	128.9	238.9	264.5	312.3	63.9	63.7	67.7	66.3	1,246.0
Other donors	0.8	1.1	3.4	1 105	6.2	8.2	11.9	15.0	19.2	65.9
Total	191	512	844	1,105	1,324	320	340	330	331	5,296

TABLE A1.2 CGIAR CONTRIBUTIONS TO THE APPROVED RESEARCH AGENDA BY CENTER, 1972–2000

(millions of U.S. dollars)

Centers 19	972-76 ¹ 19	977-81 ¹	1982-86	1987-91	1992-96	1997	1998	1999	2000	Total
CIAT	28.3	65.8	107.0	132.5	138.8	31.7	32.1	28.7	29.7	594.5
CIFOR					30.5	10.6	11.3	11.5	12.4	76.3
CIMMYT	33.7	72.6	97.2	130.8	130.2	28.6	30.1	33.8	37.9	594.9
CIP	10.9	34.8	52.9	83.2	91.4	22.6	22.2	20.0	20.5	358.5
ICARDA	1.5	47.2	91.5	92.2	92.2	22.3	25.2	19.5	22.6	414.1
ICLARM					30.3	9.0	10.6	14.2	12.3	76.4
ICRAF					71.3	21.8	20.4	20.6	21.5	155.7
ICRISAT	19.8	59.5	103.2	143.1	134.4	26.9	26.5	21.2	21.9	556.4
IFPRI	1.0	9.9	20.5	41.5	51.3	18.2	20.1	20.8	21.5	204.7
IITA	37.1	72.4	101.1	107.9	111.3	27.5	29.2	30.7	29.4	546.7
ILRI ²	13.6	80.8	107.0	155.2	124.6	25.2	24.6	26.6	23.1	580.6
IPGRI ³	1.4	11.4	20.5	33.6	64.2	18.8	21.2	20.1	22.8	213.9
IRRI	30.2	71.3	104.6	137.5	139.1	28.6	34.8	32.5	33.8	612.4
ISNAR		3.3	16.8	34.4	36.6	9.9	9.6	8.2	8.8	127.6
IWMI					36.0	9.5	9.4	8.8	8.8	72.5
WARDA	1.9	9.4	12.6	28.6	34.6	8.6	10.0	10.8	8.5	124.8
Subtotal	179.3	538.2	834.9	1,120.5	1,316.9	319.6	337.1	328.1	335.4	5,310.0
Reserves/ CGIAR C	Committees		9.1	(16.0)	7.0	0.8	2.5	1.5	(4.3)	0.6
Total	179	538	844	1,105	1,324	320	340	330	331	5,311

Figures shown for 1972–80 are total expenditures (operations/capital) and may be higher or lower than the contributions for that year (due to the accounting convention followed in the 1970s).
Formerly ILCA and ILRAD.
Formerly IBPGR and INIBAP.

TABLE A2.1 RANKING CONTRIBUTIONS TO THE CGIAR RESEARCH AGENDA, 1997–2000

(millions of U.S. dollars)

	1997		1998		1999		2000	
		OUNT		MOUNT	MEMBER AMOL	JNT		TNUC
#1	World Bank United States Japan European Commission Switzerland Denmark Germany Netherlands Canada	45.0 38.3 33.5 23.1 20.9 19.1 16.6 14.5	World Bank United States Japan European Commissio Switzerland Denmark Germany Netherlands Canada	45.0 40.5 35.3 n 24.9 22.7 17.7 16.3 14.7 12.3	World Bank Japan United States Switzerland Germany Denmark United Kingdom Canada Netherlands	45.0 39.9 39.4 22.8 15.5 14.0 13.9 12.3 11.6	World Bank United States Japan European Commission Switzerland United Kingdom Netherlands Canada Denmark	45.0 42.1 34.6 22.3 18.3 14.9 13.7 11.4 11.0
	United Kingdom Norway Sweden Australia Belgium France IDB UNDP Italy Ford Foundation	10.2 7.2 7.1 6.5 5.5 4.9 4.5 4.5 4.0 3.2	United Kingdom Sweden Norway Australia Belgium France IFAD ADB Rockefeller Foundatic UNDP	11.5 9.3 8.3 7.8 6.0 5.9 4.0 3.8 on 3.4 3.2	Sweden Norway Australia IFAD Belgium European Commission France ADB Rockefeller Foundation Italy	10.3 8.9 8.1 6.9 6.8 6.0 5.9 4.4 3.5 3.2	Germany Sweden Australia Norway France ADB IFAD Belgium Rockefeller Foundation Italy	10.2 9.4 8.5 7.7 6.0 6.0 5.8 4.7 4.0 3.2
	IFAD Colombia IDRC Finland Rockefeller ADB Spain Austria Iran, Islamic Republic of Egypt, Arab Republic of AFDB Arab Fund Ireland India		Ford Foundation Italy Colombia IDRC Austria IDB Finland Iran, Islamic Republic Arab Fund Egypt, Arab Republic Spain Ireland Nigeria Korea, Republic of	1.5	IDRC Colombia Ford Foundation AFDB Austria UNDP Arab Fund Iran, Islamic Republic of Mexico Nigeria Finland IDB Egypt, Arab Republic of Spain	1.7 1.6 1.5 1.5	Ford Foundation Colombia IDRC UNDP Austria Mexico Iran, Islamic Republic of Arab Fund Finland IDB Egypt, Arab Republic of Luxembourg Spain AFDB	2.6 2.3 2.3 1.8 1.8 1.7 1.7 1.5 1.4 1.4 1.3 1.2
#40	Luxembourg Korea, Republic of Brazil Indonesia Mexico China Pakistan	0.7 0.6 0.5 0.5 0.5 0.5	India AFDB Philippines Luxembourg Brazil South Africa Mexico	0.8 0.8 0.7 0.7 0.7 0.6 0.6	Ireland Korea, Republic of Luxembourg India China New Zealand South Africa	0.9 0.8 0.7 0.7 0.7 0.5 0.5	Nigeria China Korea, Republic of India Ireland UNEP South Africa	1.0 1.0 0.9 0.8 0.8 0.7
	South Africa Thailand Philippines Kellogg Foundation FAO Portugal OPEC Fund UNEP Côte d'Ivoire	0.5 0.5 0.4 0.3 0.3 0.3 0.2 0.2	FAO China Kenya New Zealand Peru Thailand Kellogg Foundation Portugal OPEC Fund	0.5 0.5 0.5 0.4 0.4 0.3 0.3 0.3	Syria Portugal Indonesia Kenya Brazil Philippines Bangladesh Peru FAO	0.5 0.4 0.4 0.4 0.3 0.3 0.3	New Zealand Brazil Portugal Philippines Bangladesh Uganda FAO Indonesia Peru	0.5 0.4 0.4 0.3 0.3 0.2 0.2
#50	Bangladesh	0.1	Pakistan Indonesia Bangladesh Côte d'Ivoire UNEP	0.2 0.1 0.1 0.1 0.1	UNEP OPEC Fund Côte d'Ivoire Thailand Kellogg Foundation Pakistan	0.2 0.2 0.1 0.1 0.1 0.0	OPEC Fund Pakistan Kenya Thailand Côte d'Ivoire Kellogg Foundation	0.2 0.2 0.1 0.1 0.1 0.0
	Other donors Total	8.2 320	Other donors	11.9 340	Other donors	15.0 330	Other donors	19.2 331

TABLE A2.2 CGIAR FUNDING BY MEMBER, 2000

(millions of U.S. dollars)

MEMBERS	UNRESTRICTED	RESTRICTED	TOTAL
Europe Austria Belgium Denmark European Commission Finland France Germany Ireland Italy Luxembourg Netherlands Norway Portugal Spain Sweden Switzerland United Kingdom SUBTOTAL	1.3 1.3 6.9 1.3 1.1 2.5 0.4 1.7 0.2 8.8 6.0 0.2 0.4 5.8 5.9	0.5 3.4 4.1 22.3 0.2 4.9 7.7 0.4 1.1 4.9 1.7 0.2 0.8 3.6 12.4 14.9 84.5	1.8 4.7 11.0 22.3 1.5 6.0 10.2 0.8 3.2 1.3 13.7 7.7 0.4 1.2 9.4 18.3 14.9
North America Canada United States SUBTOTAL	8.0 26.6 34.6	3.4 15.5 18.9	11.4 42.1 53.5
Pacific Rim Australia Japan New Zealand SUBTOTAL	3.6 32.6 36.2	4.9 2.0 0.5 7.3	8.5 34.6 0.5 43.5
Developing countries Bangladesh Brazil China Colombia Côte d'Ivoire Egypt, Arab Republic of India Indonesia Iran, Islamic Republic of Kenya Korea, Republic of Mexico Nigeria Pakistan Peru Philippines South Africa Thailand Uganda SUBTOTAL TOTAL MEMBER COUNTRIES	0.1 0.7 0.1 0.5 0.6 0.2 0.2 0.2 0.1 1.0 0.0 0.4 0.1 4.4	0.3 0.3 0.3 2.3 0.9 0.2 1.5 0.1 0.5 1.7 0.2 0.2 0.6 0.3 9.3 119.9	0.3 0.4 1.0 2.3 0.1 1.4 0.8 0.2 1.7 0.1 0.9 1.8 1.0 0.2 0.2 0.2 0.4 0.6 0.1 0.3 13.7
Foundations Ford Foundation Kellogg Foundation Rockefeller Foundation FOUNDATION TOTAL		2.6 0.0 4.0 6.6	2.6 0.0 4.0 6.6
International and regional organizations ADB AFDB Arab Fund FAO IDB IDRC IFAD OPEC Fund UNDP UNEP World Bank ORGANIZATIONS TOTAL OTHER DONORS GRAND TOTAL	45.0 45.0 164	6.0 1.2 1.7 0.2 1.4 2.3 5.8 0.2 1.8 0.7 21.3 19.2 167	6.0 1.2 1.7 0.2 1.4 2.3 5.8 0.2 1.8 0.7 45.0 66.3 19.2 331

TABLE A2.3a SUPPORT TO THE AGREED RESEARCH AGENDA BY MEMBER BY CENTER, 2000

(millions of U.S. dollars)

Unrestricted support

Members	CIAT	CIFOR	CIMMYT	CIP	ICARDA	ICLARM	ICRAF	ICRISAT	IFPRI	IITA	ILRI	IPGRI	IRRI	ISNAR	IWMI	WARDA	UNALLOC.	TOTAL
Australia	0.2	0.3	0.6	0.2	0.1	0.2	0.1	0.4	0.2		0.2	0.3	0.6	0.1	0.2			3.6
Austria		0.1	0.2	0.3	0.0		0.2	0.2		0.2	0.2	0.1						1.3
Belgium	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.2	0.1		0.2	0.1	0.1		1.3
Brazil			0.0	0.1			0.0											0.1
Canada	0.8	0.3	0.7	0.6	0.4	0.2	0.4	0.6	0.4	0.7	0.7	0.5	0.7	0.4	0.2	0.5		8.0
China			0.1	0.1	0.0	0.0		0.0	0.1		0.0	0.1	0.1	0.0	0.0			0.7
Côte d'Ivoire																0.1		0.1
Denmark	0.2	0.1	0.5	0.6	0.4	0.6	0.3	0.2	0.7	0.8	0.5	0.5	0.6	0.2	0.4	0.1		6.9
Egypt, Arab Republic of					0.2	0.4												0.5
Finland		0.3					0.3		0.3		0.3							1.3
France		0.1		0.1	0.1		0.1		0.1	0.1		0.2	0.2	0.0		0.1		1.1
Germany	0.4	0.2				0.3	0.2			0.4	0.2	0.3	0.4		0.2			2.5
India			0.1	0.0	0.0	0.0		0.2	0.0		0.0	0.1		0.0	0.0			0.6
Indonesia		0.2																0.2
Iran, Islamic Republic of				0.1	0.1									0.0				0.2
Ireland							0.1		0.3									0.4
Italy				0.0	0.2			0.1	0.1	0.2	0.2	0.9		0.1				1.7
Japan	3.3	1.3	2.3	1.5	0.7	0.9	0.9	2.8	1.4	3.8	1.3	1.9	7.5	0.3	0.9	1.8		32.6
Korea, Republic of			0.1	0.1				0.1		0.1		0.1	0.2			0.1		0.5
Luxembourg				0.2														0.2
Mexico			0.1															0.1
Netherlands	0.1	1.0		0.8	0.7	0.9	0.6	0.1	0.3	0.7	0.1	1.3	0.2	0.9	0.5	0.7		8.8
Nigeria										1.0								1.0
Norway	0.6	0.3	0.2	0.2	0.5	0.2	0.2	8.0	0.3	0.6	1.0	0.4	0.1	0.3		0.3		6.0
Peru			0.0		0.0													0.0
Philippines		0.0	0.0			0.0	0.0	0.0	0.0			0.0	0.2	0.0				0.4
Portugal			0.1				0.1											0.2
Spain	0.1	0.0	0.0	0.0	0.1		0.0		0.1		0.0	0.1		0.0				0.4
Sweden	0.3	0.2	0.2	0.7	0.4	0.2	0.4	0.5	0.1	0.4	0.7	0.4	0.4	0.3	0.3	0.3		5.8
Switzerland	0.9	0.2	0.2	0.9			0.3	0.9	0.3		0.9	0.5	0.2	0.3	0.2			5.9
Thailand	0.0		0.0				0.0	0.0				0.0	0.0					0.1
United States	2.3	0.6	4.3	1.1	1.5	0.7	0.6	2.2	1.7	3.3	3.0	0.6	3.5	0.5	0.8	0.3		26.6
World Bank ¹	3.8	1.4	4.2	2.7	3.7	2.0	3.0	2.8	3.1	3.8	3.1	3.3	3.4	1.5	1.4	1.3	8.0	45.0
Advance 2001	٠,				0.5													
/draw on reserves	0.6	0.3	0.4	0.6	0.5	0.3	0.1	0.6	0.1	150	0.1	0.4	0.5	0.3	0.2			5.0
Total unrestricted	13.5	6.9	14.4	10.9	9.8	7.0	8.1	12.4	9.4	15.9	12.8	12.0	18.8	5.6	5.3	5.6	0.8	169.1
¹ Total World Bank	contributi	on was	\$45 mill	ion, of	which \$4	4.25 m	illion wa	s allocat	ed to Ce	nters ar	nd \$0.75	million	for Com	nmittees	and rese	erves.		

TABLE A2.3b MEMBER SUPPORT TO THE APPROVED RESEARCH AGENDA BY CENTER, 2000

(millions of U.S. dollars)

Restricted contributions

Members	CIAT	CIFOR	CIMMYT	CIP	ICARDA	ICLARM	ICRAF	ICRISAT	IFPRI	IITA	ILRI	IPGRI	IRRI	ISNAR	IWMI	WARDA	UNALLOC.	TOTA
ADB	0.4	0.2	0.4	0.1	0.3	0.5	0.3	0.4	0.9		0.4	0.4	1.1	0.1	0.5			6.
AFDB		0.1						0.2			0.2	0.1		0.1	0.1	0.3		1.
rab Fund					1.7													1.
ustralia	0.3	0.1	1.4		0.3	0.0	0.1	0.2	0.3		0.2	0.0	1.7	0.0	0.1			4
ustria				0.2						0.3								0
angladesh			0.2										0.1					0
elgium	0.2		0.3					0.3		1.1	0.1	1.3	0.1					3
razil	0.2	0.0	0.0									0.1						0
anada	0.4	0.0	1.0	0.0	0.0	0.0	1.5	0.0	0.1	0.0		0.0	0.0	0.1	0.1	0.0		3
hina			0.3															0
olombia	2.1		0.2	0.1														2
)enmark	0.1	0.1	0.1	0.3	0.1		0.5	0.0	1.4	0.5		0.1	0.6	0.1	0.0	0.1		4
uropean Commission	2.8	1.7	3.0	1.9	2.2	0.8	2.3	1.7	1.3	0.1	1.5	1.5	1.4			0.1		22
gypt, Arab Republic of					0.9													0
AO	0.0	0.0		0.1		0.0		0.0			0.0	0.1						0
inland							0.1				0.0	0.1						(
ord Foundation	0.4	0.0	0.1	0.1	0.1	0.1	0.2		0.5	0.0	1.0				0.2			2
rance	0.7	0.2	1.1	0.1	0.1		0.5	0.4		0.6	0.4	0.4	0.4		0.2			4
ermany	0.7	0.2	0.7	0.9	0.4	0.3	0.2	0.4	0.6	0.5	0.6	0.5	0.8		0.4	0.4		7
OB '	0.4		0.6	0.2				0.0	0.1			0.1						1
ORC	0.7	0.1	0.1	0.2	0.1	0.0	0.3	0.1			0.2	0.3	0.2	0.0	0.0			2
FAD	0.0	0.4	0.8	0.3	1.3	0.1	0.4	0.5	0.1	0.9	0.5	0.4	0.2			0.1		5
ndia								0.1					0.2					0
an, Islamic Republic of	0.0		0.2		0.9			0.1					0.2		0.1			1
reland									0.1		0.3							(
aly	0.2			0.1	0.3					0.1	0.6	0.1						1
apan	0.3		0.1	0.2		0.3					0.1		0.7	0.3	0.1			2
Cellogg Foundation	0.0																	0
lenya							0.1											0
Corea, Republic of			0.1		0.1		•				0.1	0.1	0.2					0
uxembourg			•	0.2	0.7						•	0.1	V					1
Mexico			0.5	0.2	0.7				1.2			0.1						1
letherlands	0.2	0.0	0.4	0.5	0.2		1.1	0.2	1.2	0.1	0.3	0.8	0.4	0.6	0.1			4
lew Zealand	0.2	0.0	0.1	0.5	0.2	0.1	0.2	0.2		0.1	0.0	0.0	0.1	0.0	0.1			0
orway	0.2	0.1				0.1	0.5	0.1	0.6		0.2	0.1			0.1	0.0		1
PEC Fund		0.1	0.0	0.0	0.0	0.1	0.5	0.1	0.0		0.1	0.1			0.1	0.0		(
akistan			0.0	0.0	0.1			0.1			0.1				0.0			(
eru	0.0		0.0	0.1	0.1							0.0			0.0			0
ortugal	0.0		0.0	0.1								0.0			0.0			0
ockefeller Foundation	0.3	0.0	1.1			0.0	0.3	0.3	0.0	0.6	0.1	0.0	1.0			0.2		4
outh Africa	0.0	0.0	0.2	0.1	0.0	0.0	0.5	0.3	0.0	0.0	0.1	0.0	1.0	0.1	0.1	U.Z		0
pain	0.0	0.1	0.2	0.1	0.0		0.2	U. I		U. I	0.1	0.1		0.1	0.1			(
weden		0.1	0.1	U.I	0.1	0.4	1.7		0.5	0.0	0.3	0.3			0.1			3
weaen witzerland	1.4	0.3 0.1	1.8	1.7	0.4	0.4	0.5	0.4	0.5	0.0	0.3	0.1	2.5	0.6	0.1			12
witzeriana Iganda	1.6	U. I	1.0	1./	0.6		0.5	U.4	0.4	υ.δ	0./	0.7	2.5	U.0	0.1			
Iganaa INDP			1.0		0.0	0.0		0.0		0.2				0.1		Λ1		(
NDP NEP	0.0		1.0		0.2	0.0	0.0	0.0		0.3		0.1		0.1		0.1		1
	0.0	0.0	1.4	0.7	0.0	0.5	0.0	0.1	0.4	0.7	1.0	0.1	0.7	0.0	0.0	0.0		(
nited Kingdom	1.0	0.8	1.4	0.7	0.9	0.5	0.8	1.7	0.4	0.7	1.8	1.0	2.6	0.3	0.3	0.3]4
nited States	1.0	0.2	0.8	1.3	0.1	1.2	1.0	1.5	1.6	5.2	0.5	0.1	0.7	0.0	0.0	0.4		15
Total restricted	14.3	4.6	18.3	9.3	11.6	5.0	12.8	8.8	9.9	11.9	10.0	9.3	14.9	2.5	2.7	2.1		147
lon-Members	2.0	0.8	5.2	0.3	1.2	0.3	0.6	0.7	2.2	1.5	0.3	1.5	0.2	8.0	0.8	0.8		19
Grand total	29.7	12.4	37.9	20.5	22.6	12.3	21.5	21.9	21.5	29.4	23.1	22.8	33.8	8.8	8.8	8.5	0.8	336
(Unrestricted																		
and restricted																		

TABLE A2.4a MONTHLY DISBURSEMENT OF FUNDING BY MEMBER, 2000

(millions of U.S. dollars)

nunctulated com M	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Receivable	TOTAL
nrestricted support Members ustralia	3.6													3.6
ustria				1.3									1.0	1.3
elgium razil					0.0							0.1	1.3	1.3
anada					0.0			8.0				0.1		8.0
hina								0.0					0.7	0.7
ôte d'Ivoire													0.1	0.1
enmark							0.5	0.5	6.3					6.9
gypt, Arab Republic of nland							0.5					1.3		0.5
rance									1.1			1.3		1.1
ermany		0.4	0.2	0.3	0.2	0.6	0.6		0.3					2.5
dia							0.6							0.6
donesia							0.2							0.2
an, Islamic Republic of					0.1				0.2	0.1		0.1		0.2
eland Ily					0.1				0.3 1. <i>7</i>					0.4
pan									1.7			32.6		32.6
orea, Republic of												0.4	0.1	0.5
xembourg				0.2										0.2
exico	0.7		0.5	0.0	0.1	0.7	0.4							0.1
etherlands	0.7		3.5	0.3	0.9	0.7	2.4	0.3	1.0					8.8
geria orway						6.0			1.0					1.0
ru						0.0						0.0		0.0
ilippines										0.4				0.4
rtugal													0.2	0.2
ain	1.0			0.4	0.4	6.3	2 1	0.0	2.2	0.0				0.4
veden vitzorland	1.9 5.9			0.4	0.2	2.1	0.4	0.3	0.3	0.2				5.5
vitzerland ailand	3.9												0.1	0.
nited States											20.0	6.7	0.1	26.6
forld Bank	35.2					6.8	3.0							45.0
eserves/advance							5.0							5.0
Subtotal	47.4	0.4	3.7	2.6	1.9	16.1	12.7	9.1	11.0	0.6	20.0	41.2	2.4	169.
estricted support Members														
ostricted support members				0.2	0.8		1.4			0.9	0.6	0.6	1.5	6.0
DB				0.2	0.0		1.4			0.7	0.0	1.2	1.5	1.2
ab Fund									0.8			0.9		1.7
stralia	0.5		0.2			0.3	0.0				0.0	1.6	2.2	4.9
ıstria				0.5										0.5
ngladesh													0.3	0.0
elgium azil												0.3	3.4	3.4
anada				1.5	0.3		0.0	0.0				1.5		3.4
hina				1.0	0.0		0.0	0.0				1.0	0.3	0.0
olombia												2.3		2.3
enmark	0.0	0.1				0.7		0.1	0.2			2.9		4.0
ropean Commission												0.9	22.3	22.
gypt, Arab Republic of O	0.0											0.9		0.9
nland	0.0											0.2		0.2
rd Foundation												2.6		2.0
ance						0.7			4.2					4.9
ermany	0.2	0.5		0.3		0.4		0.7	0.4		0.1	1.8	3.4	7.7
B RC	0.1			0.0	0.1							1.3		1.4
KC AD	0.1			0.0	0.1					0.0		2.2 2.1	3.6	2.5 5.8
lia	0.1									5.0		0.2	5.0	0.:
n, Islamic Republic of										0.1		1.4		1
land									0.4					0.4
ly									1.4					1.4
oan													2.0 0.1	2.0
nya rea, Republic of												0.5	0.1	0.
xembourg										1.1		5.0		1.
exico					1.7									1.3
etherlands .			0.1		0.0		_		0.2			1.5	3.1	4.
ew Zealand						1 7	0.2					0.3		0
orway PEC Fund				0.1		1.7						0.1	0.1	1.
kistan				0.1								0.1	0.1	0.
'U	0.1											0.1		0.
tugal													0.2	0.
ckefeller Foundation			0.3			1.1		0.8		0.3		1.5		4.
uth Africa												0.6		0.0
ain					0.8	2.0			0.3			0.4		0.1
veden vitzerland	11.3	0.5				3.0			0.3			0.4 0.5		3.d 12.3
janda	11.5	0.5								0.3		0.5		0.3
NDP				0.0						5.0		1.8		1.6
NEP						0.1						0.6		0.3
ited Kingdom	0.0			0.1	2.3	0.1	0.8	0.3	2.3	2.8		3.5	2.8	14.
ited States	0.2		0.7		0.2							7.0	7.5	15.
on-Members	0.1	1.0	1.0	0.2	2.1	1.3	1.4	0.9	0.2	2.5	0.7	5.4	5.2	19.
Subtotal Total monthly amount	12.5 59.9	1.3 1. <i>7</i>	1.2	3.0 5.6	8.2	9.4 25.5	3.8	2.8 12.0	10.4 21.4	7.9	0.7	47.8 89.0	58.0 60.5	167. 336.
Total monthly amount Total monthly percent	18%	1./	4.8 1%	5.6 2%	10.1 3%	25.5 8%	16.5 5%	4%	6%	8.6 3%	20.7 6%	26%	18%	1009
	59.9	61.6	66.4	72.0	82.1	107.6	124.1	136.1	157.5	166.0	186.7	275.6	336.1	336.0
Cumulative amount														

TABLE A2.4b MEMBER CONTRIBUTIONS DISBURSED THROUGH THE WORLD BANK, 1999-2000

(millions of U.S. dollars)

			1999 Disbursemen	t			2000 Disburseme	nt
Members	Nation curren		in U.S. dollars	Month	Natio currer		in U.S. dollars	Month
Austria			1.5	May			1.5	April
Canada ¹	CAD	8.0	12.6	July	CAD	12.6	8.5	May/August
China			0.7	December			0.7	January 2001
European Commission					EUR	14.9	13.5	January 2001
Finland	FIM	8.0	1.7	May	FIM	8.0	1.3	December
France ²	FF	14.3	2.1	February 2000	FF	14.4	1.8	September
Italy			2.5	October			2.1	September
Mexico			0.1	April			0.1	May
Norway	NOK	57.0	7.3	August	NOK	57.0	6.6	June
Peru			0.1	September				
Portugal			0.5	July			0.5	March 2001
South Africa			0.5	December			0.5	December
Spain			1.1	April			0.7	May
Thailand			0.1	December			0.1	February 2001
United States ³			4.9	November			32.5	July/Dec
Total			35.7				70.4	

Includes allocation to a non-CGIAR center (IBSRAM), and Linkage Fund contributions (CAD 450,000).
 Includes allocations to three non-CGIAR centers (AVRDC, IBSRAM, and ICRA).
 Includes grants for strengthening African networks (\$4,759), and for integrating agricultural and environmental research (\$1,139).

TABLE A2.5 CGIAR FUNDING BY CENTER, 2000

(millions of U.S. dollars)

	Unrestricted support	Restricted support	Member total	Percent of targeted support
CIAT	13.5	16.2	29.7	55%
CIFOR	6.9	5.5	12.4	44%
CIMMYT	14.4	23.5	37.9	62%
CIP	10.9	9.6	20.5	47%
ICARDA	9.8	12.8	22.6	57%
ICLARM	7.0	5.3	12.3	43%
ICRAF	8.1	13.4	21.5	62%
ICRISAT	12.4	9.5	21.9	43%
IFPRI	9.4	12.1	21.5	56%
IITA	15.9	13.5	29.4	46%
ILRI	12.8	10.3	23.1	45%
IPGRI	12.0	10.8	22.8	47%
IRRI	18.8	15.0	33.8	44%
ISNAR	5.6	3.2	8.8	37%
IWMI	5.3	3.5	8.8	40%
WARDA	5.6	2.9	8.5	34%
Center total	168.4	167.1	335.4	50%
Reserves/CGIAR Committees	(4.3)		(4.3)	
Total grants	164	167	331	50%

TABLE A2.6 FUNDING OUTCOMES BY CENTER, 2000 (millions of U.S. dollars)

	2000		2000 fin	Funding in relation to	2000 funding			
	Requirements	Unrestricted Restricted support 1 support 2		World Bank contributions	Total funding	financing plan	in relation to 1999 funding	
CIAT	32.9	9.1	16.2	4.4	29.7	90%	103%	
CIFOR	12.2	5.3	5.5	1.7	12.4	102%	108%	
CIMMYT	33.1	9.8	23.5	4.6	37.9	115%	112%	
CIP	17.9	7.6	9.6	3.3	20.5	115%	103%	
ICARDA	22.9	5.6	12.8	4.1	22.6	99%	116%	
ICLARM	14.7	4.7	5.3	2.3	12.3	84%	87%	
ICRAF	22.6	5.0	13.4	3.1	21.5	95%	104%	
ICRISAT	23.3	9.2	9.4	3.4	21.9	94%	103%	
IFPRI	23.2	6.1	12.1	3.2	21.4	92%	103%	
IITA	32.5	12.2	13.5	3.8	29.4	90%	96%	
ILRI	28.0	9.6	10.3	3.2	23.1	83%	87%	
IPGRI	24.2	8.3	10.7	3.8	22.8	94%	113%	
IRRI	30.1	14.8	15.0	3.9	33.8	112%	104%	
ISNAR	9.5	3.8	3.2	1.8	8.8	93%	107%	
IWMI	10.1	3.7	3.5	1.6	8.8	87%	100%	
WARDA	12.2	4.8	2.4	1.3	8.5	70%	79%	
Subtotal	349.4	119.6	166.5	49.3	335.4	96%	102%	
Reserves/CGIAR Committees				(4.3)	(4.3)			
Total	349	121	167	45	331			

Unrestricted support in the form of unrestricted contributions.
 Support targeted at programs or specific projects.

TABLE A2.7 CGIAR SYSTEM GRANTS BY CENTER, 1996–2000

(millions of U.S. dollars)

	1996	1997	1998	1999	2000					
		Grants supporting the agreed research agenda								
CIAT CIFOR CIMMYT CIP ICARDA ICLARM ICRAF ICRISAT IFPRI IITA ILRI IPGRI	31.0 8.7 27.4 22.7 21.1 9.6 17.4 27.4 16.0 22.4 24.8 16.4	31.7 10.6 28.6 22.6 22.3 9.0 21.8 26.9 18.2 27.5 25.2 18.8	32.1 11.3 30.1 22.2 25.2 10.6 20.4 26.5 20.1 29.2 24.6 21.2	28.7 11.5 33.8 20.0 19.5 14.2 20.6 21.2 20.8 30.7 26.6 20.1	29.7 12.4 37.9 20.5 22.6 12.3 21.5 21.9 21.5 29.4 23.1 22.8					
IRRI ISNAR IWMI WARDA Total grants	28.7 10.7 9.0 8.7	28.6 9.9 9.5 8.6	34.8 9.6 9.4 10.0	32.5 8.2 8.8 10.8	33.8 8.8 8.8 8.5 335.4					
Other net flows Reserves/advance CGIAR Committees	2.3	0.8	2.5	1.5	(5.0) 0.8					
Total support to the agreed research agenda	304.2	320.4	339.6	329.6	331.2					
		Non-agenda funding								
Total support to non-agenda	28.4	13.1	0.0	0.0	0.0					
Total funding	333	334	340	330	331					

TABLE A2.8 WORLD BANK FUNDING BY CENTER, 1996-2000

(millions of U.S. dollars and percentage terms)

	Amount in millions of U.S. dollars						P	ercent o	f	f total agenda fundi	
	1996	1997	1998	1999	2000	Ī	1996	1997		1998	1998 1999
AT	4.9	4.6	3.1	3.4	4.4		18%	15%		10%	10% 11%
CIFOR	0.6	0.9	1.2	1.4	1.7		8%	10%		11%	11% 12%
MMYT	4.4	3.7	3.3	3.8	4.6		17%	14%		12%	12% 12%
Р	1.6	1.8	2.3	2.9	3.3		8%	8%		10%	10% 13%
ARDA	3.3	2.9	5.4	2.1	4.1		18%	14%		24%	24% 9%
_ARM	1.5	1.3	1.1	4.1	2.3		20%	13%		12%	12% 38%
AF	1.5	1.9	2.1	2.5	3.1		9%	11%		10%	10% 12%
RISAT	5.2	6.7	5.7	2.4	3.4		20%	24%		21%	21% 9%
PRI	1.3	1.6	2.0	2.4	3.2		13%	10%		11%	11% 12%
4	3.8	3.8	3.0	2.7	3.8		17%	17%		11%	11% 9%
I	6.3	5.2	4.7	3.9	3.2		26%	21%		18%	18% 16%
SRI .	1.6	2.0	2.1	2.9	3.8		13%	12%		11%	11% 14%
RI	4.8	4.5	3.1	3.7	3.9		18%	16%		11%	11% 11%
NAR	1.5	1.3	1.5	1.0	1.8		23%	12%		15%	15% 10%
MI	1.5	1.2	1.0	2.3	1.6		21%	13%		10%	10% 24%
ARDA	0.6	0.9	1.1	2.2	1.3		7%	10%		13%	13% 20%
Center total	44.4	44.2	42.5	43.5	49.3		16%	15%		13%	13% 13%
GIAR Committee and System re		0.3	1.0 1.5	1.0	0.8						
serve	0.5	0.5		0.5	(2.0)						
dvance 2001					(3.0)						
otal	44.9	45.0	45.0	45.0	45.0						

TABLE A3.1 CGIAR INVESTMENTS BY CENTER, 1996–2000

(millions of U.S. dollars)

	1996	1997	1998	1999	2000
CLAT	24.0	22.2	22.5	20.7	20.5
CIAT	36.8	33.3	33.5	30.7	29.5
CIFOR	9.4	10.6	11.1	12.7	12.6
CIMMYT	28.7	30.4	32.2	37.4	39.0
CIP	24.6	24.7	21.7	21.6	20.2
ICARDA	23.2	27.6	23.6	22.8	23.4
ICLARM	8.6	8.6	10.4	12.4	10.4
ICRAF	17.4	22.2	21.1	21.8	20.7
ICRISAT	28.8	26.7	21.8	23.2	23.3
IFPRI	16.2	18.1	18.6	20.1	21.2
IITA	28.4	28.5	29.4	32.7	30.1
ILRI	25.9	26.7	27.7	26.5	26.5
IPGRI	16.5	18.6	21.7	20.4	21.5
IRRI	30.4	28.2	35.0	35.1	32.6
ISNAR	11.2	10.4	9.9	9.7	8.2
IWMI	9.2	9.6	9.2	8.8	8.9
WARDA	9.8	9.2	9.9	10.9	9.4
Agreed agenda	325.0	333.3	336.8	346.8	337.5

TABLE A3.2 CGIAR RESEARCH AGENDA INVESTMENTS BY ACTIVITY, 1996–2000 (millions of U.S. dollars and percentages)

	19	996	19	97	1	998	19	999	20	00
	\$	%	\$	%	\$	%	\$	%	\$	%
Increasing productivity	129.1	40%	133.1	40%	124.3	37%	117.3	34%	119.7	36%
of which:										
	50.0	1.00/		1.00/	40.0	1.00/		1.00/	41.0	1.00/
Germplasm enhancement and breeding	58.8	18%	63.7	19%	60.0	18%	61.2	18%	61.8	18%
Production systems development and										
management	70.2	22%	69.4	21%	64.3	19%	56.1	16%	57.9	18%
Cropping systems	40.5	12%	35.1	11%	32.7	10%	29.3	8%	32.1	10%
Livestock systems	18.4	6%	18.7	6%	19.7	6%	15.6	4%	13.8	4%
Tree systems	9.2	3%	14.2	4%	10.4	3%	9.3	3%	8.3	3%
Fish systems	2.2	1%	1.4	0.4%	1.5	0.4%	1.9	0.5%	3.7	1%
Protecting the environment	53.7	17%	57.4	17%	64.5	19%	67.9	20%	60.4	18%
Saving biodiversity	34.6	11%	35.3	11%	37.2	11%	36.2	10%	34.8	10%
									40.0	
Improving policies	38.9	12%	37.3	11%	39.9	12%	46.8	13%	48.0	14%
Strengthening NARS	68.7	21%	70.2	21%	70.9	21%	78.6	23%	74.6	22%
Training	24.6	8%	25.1	8%	27.0	8%	29.8	9%	29.8	9%
Documentation/publication/information	18.3	6%	19.9	6%	20.1	6%	20.7	6%	19.9	6%
Institution building/advice to NARS	12.2	4%	11.5	3%	10.5	3%	12.7	4%	10.2	3%
Institution building networks	13.7	4%	13.7	4%	13.3	4%	15.4	4%	14.7	4%
TOTAL	325.0	100%	333.3	100%	336.8	100%	346.8	100%	337.5	100%

TABLE A3.3 CENTERS' RESEARCH AGENDA INVESTMENTS BY ACTIVITY, 2000

(millions of U.S. dollars)

		Incre	asing Prod			Protecting	Saving	Improving		Strengthen	ing NARS				Funding Source	9
	Enhance and breed	Crops	Production Syst Livestock	ems Dev & Mgmt Trees	Fish	the environment	biodiversity	policies	Training	Info	Org/Mgmt	Networks	Total	Member funding	Center income	Reserves
CIAT	7.8	3.2	1.3			6.7	4.3	1.5	1.4	1.3	0.5	1.6	29.5	29.7	1.0	
CIFOR				3.1		3.8	1.6	2.8	0.2	1.1			12.6	12.4	0.4	
CIMMYT	11.3	3.2				7.4	5.5	1.5	5.4	1.5	1.8	1.5	39.0	37.9	1.3	
CIP	6.8	5.2					3.1	1.9				3.2	20.2	20.5	0.6	
ICARDA	4.1	3.8	1.7			5.1	4.0	1.5	0.7	0.7	1.5	0.3	23.4	22.6	1.1	
ICLARM	1.0				3.7	2.6	0.1	1.4	0.6	0.5		0.5	10.4	12.3	0.5	
ICRAF	1.0			5.0		4.7	0.8	3.5	4.2	1.0	0.6		20.7	21.5	0.8	
ICRISAT	6.2	3.6	0.2	0.1		3.2	2.3	3.5	2.3	0.8		1.0	23.3	21.9	1.7	
IFPRI						2.2		13.0	3.1	3.0			21.2	21.5	0.9	
IITA	7.8	7.2				4.4	1.1	2.7	1.6	1.4	2.0	1.9	30.1	29.4	0.9	
ILRI	1.9		10.6			6.0	1.4	2.6	1.6	1.3		1.1	26.5	23.1	1.8	(1.6)
IPGRI	2.7	0.9		0.1		1.7	7.9	2.9	1.6	2.0	0.2	1.5	21.5	22.8	0.6	
IRRI	9.7	3.6				7.2	2.2	3.8	2.6	3.3		0.2	32.6	33.8	1.6	
ISNAR								1.2	2.3	1.4	3.2	0.1	8.2	8.8	0.3	
IWMI						3.6		3.1	1.1			1.1	8.8	8.8	0.4	
WARDA	1.5	1.4				2.0	0.5	1.0	1.1	0.7	0.5	0.7	9.4	8.5	0.3	(0.6)
Total	61.8	32.1	13.8	8.3	3.7	60.4	34.8	48.0	29.8	19.9	10.2	14.7	337.5	335.4	13.9	(2.2)
Undertaking investments			119.7			60.4	34.8	48.0			74.6		337.5			

TABLE A3.4 REGIONAL ALLOCATIONS, 2000

(millions of U.S. dollars and percentages)

	EXPENDITURE	Sub-Sahar	ran Africa	As	ia	Latin Ame the Car		West As North	
	EXI ENDITORE	%	\$	%	\$	%	\$	%	\$
CIAT	29.5	23%	6.8	12%	3.5	63%	18.5	2%	0.7
CIFOR	12.6	29%	3.7	37%	4.6	34%	4.2		
CIMMYT	39.0	37%	14.5	28%	10.9	25%	9.7	10%	3.9
CIP	20.2	18%	3.6	51%	10.3	26%	5.2	5%	1.1
ICARDA	23.4	15%	3.5	12%	2.7	3%	0.7	71%	16.5
ICLARM	10.4	30%	3.2	58%	6.0	4%	0.4	8%	0.8
ICRAF	20.7	76%	15. <i>7</i>	18%	3.6	7%	1.4		
ICRISAT	23.3	50%	11.6	48%	11.3	1%	0.2	1%	0.2
IFPRI	21.2	50%	10.6	26%	5.5	18%	3.7	7%	1.4
IITA	30.1	96%	28.8	2%	0.7	2%	0.7		
ILRI	26.5	67%	1 <i>7</i> .8	21%	5.6	10%	2.6	2%	0.5
IPGRI	21.5	28%	6.0	27%	5.8	23%	5.0	22%	4.8
IRRI	32.6	4%	1.3	92%	30.0	3%	1.0	1%	0.3
ISNAR	8.2	38%	3.1	27%	2.2	29%	2.4	6%	0.5
IWMI	8.9	7%	0.7	81%	7.2	5%	0.4	7%	0.6
WARDA	9.4	100%	9.4						
Total	338	42%	140	32%	110	17%	56	9%	31

TABLE A3.5 CGIAR OBJECT EXPENDITURES, 2000 (millions of U.S. dollars and percentages)

	Personnel	Supplies/ services	Travel	Depreciation	Total
CIAT CIFOR CIMMYT CIP ICARDA ICLARM ICRAF ICRISAT IFPRI IITA ILRI IPGRI IRRI ISNAR IWMI WARDA	15.5 5.8 20.1 8.8 9.0 4.6 11.1 12.5 10.0 13.9 13.3 9.5 14.9 4.6 5.5 4.3	10.7 5.5 15.2 9.7 10.8 4.9 6.4 7.7 9.3 12.2 9.6 10.1 12.8 2.6 1.9 3.6	2.2 0.7 2.2 1.2 2.5 0.9 2.2 1.7 1.5 1.7 1.6 1.5 2.7 0.8 1.0 0.5	1.2 0.6 1.4 0.5 1.2 0.0 1.0 1.4 0.3 2.4 2.0 0.4 2.2 0.2 0.5 1.0	29.5 12.6 39.0 20.2 23.4 10.4 20.7 23.3 21.2 30.1 26.5 21.5 32.6 8.2 8.9 9.4
		. 33		. •	

		Personnel	Supplies/	Travel Deprec	ation Total
		service	S		
CIAT CIFOR CIMMYT CIP ICARDA ICLARM ICRAF ICRISAT IFPRI IITA	52% 46% 52% 44% 38% 44% 54% 54% 47% 46% 50%	36% 44% 39% 48% 46% 48% 31% 33% 44% 41%	7% 5% 6% 6% 11% 8% 11% 7% 7% 6%	4% 4% 4% 2% 5% 0% 5% 6% 1% 8%	100% 100% 100% 100% 100% 100% 100% 100%
IPGRI IRRI ISNAR IWMI WARDA Total	44% 46% 56% 62% 46%	47% 39% 32% 22% 38%	7% 8% 10% 11% 5%	2% 7% 2% 6% 11%	100% 100% 100% 100% 100%

TABLE A3.6 CGIAR STAFFING, 1996-2000

	1996		199	7	199	8	199	9	2000		
	International staff	Other staff									
CIAT	76	650	60	678	64	639	62	610	58	638	
CIFOR	32	78	31	86	31	83	30	86	37	118	
CIMMYT	73	669	81	775	88	726	86	746	86	795	
CIP	63	576	64	527	62	480	64	607	58	529	
ICARDA	85	395	76	405	83	333	92	330	94	330	
ICLARM	20	207	27	183	28	263	30	291	24	225	
ICRAF	53	355	50	286	56	313	52	305	47	258	
ICRISAT	84	1,787	62	1,289	55	1,041	59	1,155	54	1,120	
IFPRI	41	82	45	94	43	89	44	83	52	90	
IITA	86	1,659	86	1,499	82	1,268	79	1,090	83	1,043	
ILRI	79	800	61	806	80	777	76	725	67	746	
IPGRI	41	86	41	121	43	112	46	112	46	143	
IRRI	64	1,374	82	836	90	835	82	960	79	997	
ISNAR	38	53	53	35	49	38	45	40	32	35	
IWMI	22	305	22	356	21	243	25	226	26	211	
WARDA	21	340	21	319	17	338	35	335	30	364	
Total	877	9,416	862	8,295	892	7,578	907	7,701	873	7,642	

TABLE A3.7 CENTERS' INFLATION RATES, 1996-2000

(calculated by uniform measurement)

	CIAT	CIFOR	CIMMYT	CIP	ICARDA	ICLARM	ICRAF	ICRISAT	IFPRI	IITA	ILRI	IPGRI	IRRI	ISNAR	IWMI	WARDA	Total
1996	4.7%	2.8%	8.6%	3.9%	4.6%	4.1%	5.1%	2.4%	5.3%	8.6%	2.3%	4.3%	4.2%	(0.5%)	5.1%	1.1%	4.5%
1997	4.4%	(1.2%)	9.3%	3.5%	2.6%	0.2%	4.1%	(0.4%)	3.1%	5.5%	2.9%	0.9%	(1.5%)	(5.7%)	2.0%	(1.7%)	2.6%
1998	(0.2%)	(5.7%)	1.0%	1.7%	1.3%	(4.6%)	2.4%	1.1%	1.6%	4.2%	2.9%	0.8%	(7.7%)	1.2%	0.7%	2.6%	1.0%
1999	(2.9%)	11.6%	7.0%	(0.4%)	1.1%	4.7%	(1.8%)	10.0%	2.2%	(14.5%)	(1.5%)	(2.1%)	5.5%	2.1%	0.1%	(0.1%)	0.2%
2000	(1.9%)	2.0%	6.4%	2.5%	0.1%	(0.9%)	(0.9%)	(1.1%)	3.1%	(4.1%)	0.4%	(0.8%)	(0.4%)	0.0%	0.8%	(3.2%)	0.3%
Avg. (1996–2000)	0.8%	1.7%	6.4%	2.2%	1.9%	0.6%	1.7%	2.3%	3.0%	(0.4%)	1.4%	0.6%	(0.1%)	(0.6%)	1.7%	(0.3%)	2.7%
Cum. (1996—2000)	3.9%	9.0%	36.4%	11.6%	10.0%	3.2%	9.0%	12.2%	16.2%	(2.2%)	7.2%	3.1%	(0.4%)	(3.0%)	8.8%	(1.3%)	14.1%

Notes: The inflation rates are dollar-based annual rates for each Center. They are derived from:

INFLATION RATES FOR SELECTED CURRENCIES AND REGIONS¹

	CURRENCIES									REGIONS			
Year	U.S. dollar	CFA	Colombian peso	Mexican peso	Philippine peso	Pound sterling	Kenyan shilling	Indonesian rupee	Africa	Asia	Western ¹ Hemisph.	Middle East	
1996	2.9%	2.7%	20.2%	34.4%	8.4%	2.4%	8.8%	7.9%	22.8%	7.7%	23.8%	11.6%	
1997	2.3%	5.7%	18.5%	20.6%	5.1%	3.1%	12.0%	6.6%	15.4%	5.0%	13.7%	6.6%	
1998	1.6%	4.7%	21.8%	15.9%	8.9%	3.4%	5.8%	57.6%	6.0%	9.3%	10.2%	6.3%	
1999	2.2%	0.8%	11.2%	16.6%	6.7%	1.6%	2.6%	20.5%	24.1%	(65.9%)	9.7%	0.0%	
2000	3.2%	2.2%	9.5%	9.5%	4.3%	2.9%	5.9%	2.0%	3.9%	1.6%	8.7%	5.4%	

¹ Excludes the United States and Canada.

MOVEMENTS OF SELECTED CURRENCIES AGAINST THE U.S. DOLLAR2

Year	CFA	Colombian peso	Mexican peso	Nigerian naira	Philippine peso	Indonesian rupee	Japanese yen
1996	2.5%	13.6%	18.4%	0.0%	2.0%	4.2%	15.7%
1997	14.1%	10.1%	4.1%	0.0%	12.4%	24.2%	11.2%
1998	1.1%	25.0%	15.4%	0.0%	38.8%	244.2%	8.2%
1999	4.4%	23.2%	4.6%	321.9%	(4.4%)	(21.6%)	(13.0%)
2000	15.6%	18.9%	(1.1%)	13.5%	13.1%	7.2%	(5.4%)

 $^{^{2}}$ Positive percentages reflect devaluations; while negative percentages reflect revaluations.

The currency basket of a Center's expenditures (Source: Centers' 2004 MTP submissions);
 Annual inflation rates (as measured by the consumer price index) on the currencies in the basket (Source: IMF, International Financial Statistics); and

^{3.} Annual changes in exchange rates of these currencies against the U.S. dollar (Source: IMF, International Financial Statistics).

TABLE A4.1 CENTERS' FINANCIAL POSITIONS, 2000

(thousands of U.S. dollars)

Assets	CIAT	CIFOR	CIMMYT	CIP	ICARDA	ICLARM	ICRAF	ICRISAT	IFPRI	IITA	ILRI	IPGRI	IRRI	ISNAR	IWMI	WARDA	TOTAL
Current assets																	
Cash and cash equivalents	5,873	6,241	3,909	5,477	12,219	8,014	1,023	19,408	8,276	17,258	10,349	11,403	31,336	3,278	4,937	2,326	151,327
Accounts receivable:																	
Donors	5,831	2,794	8,266	3,572	4,954	3,075	4,719	3,080	3,327	6,361	4,724	3,221	4,180	635	1,134	950	60,823
Employees	127	218	420	268	311	261	122	449			636		214	12	77	382	3,498
Others	1,255	676	914	323	801	1,171	2,453	1,592		470	1,188	436	1,233	137	149	777	13,576
Inventories	328		218	571	380	4	149	942		966	1,378		925		30	615	6,506
Prepaid expenses	339	437		167	505	15	71	400		106	235	105	505	27	137	20	3,069
Other current assets	1,000		38	399		2,775			863	173							5,248
Total current assets	14,753	10,366	13,765	10,777	19,170	15,315	8,537	25,871	12,466	25,334	18,510	15,165	38,393	4,089	6,465	5,071	244,048
Fixed assets																	
Property, plant, and equipment	23,008	4,687	33,953	10,844	26,273	257	11,675	35,633	2,159	37,929	54,360	3,769	28,085	3,333	4,518	8,856	289,339
Less: accumulated depreciation	12,555	2,509	19,633	7,489	21,916	67	4,385	22,777	1,601	30,783	34,880	2,002	18,253	2,819	3,264	6,331	191,265
Total fixed assets (net)	10,453	2,178	14,320	3,355	4,357	190	7,290	12,856	558	7,146	19,480	1,767	9,832	514	1,254	2,525	98,074
	,	,	,	,	,		,	,		,	,	,	,		,	,	,
Other assets	122					320	5,096	425	5,685			203	12,539		1,338		25,728
Total assets	25,328	12,544	28,085	14,132	23,527	15,825	20,923	39,152	18,709	32,480	37,990	17,135	60,764	4,603	9,057	7,596	367,850
	,	/	,	,		,		,		,	,	,		.,	.,	- /	,
Liabilities and net assets																	
Current liabilities																	
Bank indebtedness	67															137	204
Accounts payable:	0,															107	201
Donors	3,975	2,106	2,819	689	4,210	5,789	5,096	3,433	7,589	5,688	1,863	2,712	4,548	1,560	1,604	2,976	56,658
Employees	385	2,100	385	007	558	89	372	1,078	1,501	5,000	1,803	2,7 12	22	445	1,001	232	5,369
Others	2,684	68	1,677	4,483	2,474	967	781	1,609	18	2,267	1,506	3,610	882	520	505	1,915	25,966
In-trust accounts	1,748	00	0	7,703	2,777	1,350	701	79	10	2,201	339	3,010	118	320	303	1,713	3,634
Accruals and provisions	1,740	2,652	3,549	1,781	2,272	2,221	597	1,153	1,859	5,282	2,229	1,649	21,179	405	158	1,096	48,259
Total current liabilities	9,036	4,826	8,430	6,953	9,514	10,416	6,846	7,352	9,466	13,237	7,740	7,971	26,749	2,930	2,268	6,356	140,090
Long-term liabilities	7,030	7,020	0,430	0,755	7,517	10,410	0,040	1,332	7,700	13,237	7,740	1,771	20,177	2,730	2,200	0,330	140,070
Long-term loan																	0
Other	2,666		558		2,718		2,676	6,202	1,435		501	1,681	5,636		826		24,899
Total long-term liabilities	2,666	0	558	0	2,718	0	2,676	6,202	1,435	0	501	1,681	5,636	0	826	0	24,899
Total liabilities			8,988	6,953	12,232		,			13,237		9,652			3,094		
ioidi iidbiiiiles	11,702	4,826	0,700	0,933	12,232	10,416	9,522	13,554	10,901	13,237	8,241	9,032	32,385	2,930	3,094	6,356	164,989
Net assets																	
Unrestricted	2,101	A 71 E	4 777	2 070	2 (74	4 194	2 057	7 177	4 001	4 177	4 274	4 227	0 (01	044	2 244	(1,285)	41 000
Unappropriated	,	4,715 3,003	4,777	3,070 4,109	2,674 7,874	4,124	2,857 8,544	7,177 18,421	4,001	6,177	4,374	4,227 3,256	8,681	866 807	3,266	2,525	61,802
Appropriated	11,239	3,003	14,320	4,109	7,074	1,285	0,344	10,421	3,807	13,066	25,375	3,230	19,698	007	2,697	2,323	140,026
Restricted																	0
Permanently	007				747												1 000
Temporarily	286	7 710	10.007	7 170	747	F 400	11 401	05 500	7 000	10.040	00.740	7 400	00.070	1 /70	5.070	1.040	1,033
Total net assets	13,626	7,718	19,097	7,179	11,295	5,409	11,401	25,598	7,808	19,243	29,749	7,483	28,379	1,673	5,963		202,861
Total liabilities/net assets	25,328	12,544	28,085	14,132	23,527	15,825	20,923	39,152	18,709	32,480	37,990	17,135	60,764	4,603	9,057	7,596	367,850
Ratios/indicators																	
Current ratio	1.63	2.15	1.63	1.55	2.01	1.47	1.25	3.52	1.32	1.91	2.39	1.90	1.44	1.40	2.85	0.80	1.74
Working capital — in U.S. dollars	5,717	5,540	5,335	3,824	9,656	4,899	1,691	18,519	3,000	12,097	10,770	7,194	11,644	1,159	4,197		103,958
Working capital — in days	71	160	50	69	151	172	30	290	52	147	148	122	130	52	172	(50)	112
Operating fund — in days	26	137	45	55	42	145	50	112	69	75	60	72	97	39	134	(50)	67
1																,/	

TABLE A4.2 CAPITAL INVESTMENTS BY CENTERS, 1996–2000

(millions of U.S. dollars)

	1996	1997	1998	1999	2000
CIAT	1.0	2.4	3.1	1.5	1.3
CIFOR	0.7	1.2	0.6	0.5	0.6
CIMMYT	3.0	1.1	1.6	1.5	1.4
CIP	0.8	0.5	1.1	0.6	1.6
ICARDA	2.8	2.6	1.1	1.2	1.1
ICLARM	0.5	1.5	0.9	0.3	0.2
ICRAF	0.5	0.0	7.4	1.1	0.4
ICRISAT	4.4	1.4	0.1	1.6	1.6
IFPRI	0.3	0.2	0.1	0.2	0.2
IITA	2.9	3.6	2.0	3.0	1.8
ILRI	3.2	1.4	1.6	2.1	1.4
IPGRI	1.3	0.6	0.3	0.4	0.5
IRRI	1.6	1.8	3.0	2.5	1.5
ISNAR	0.1	0.2	0.2	0.2	0.4
IWMI	0.7	0.6	0.6	0.4	0.3
WARDA	0.5	1.1	2.0	0.9	0.7
Total	24.4	20.3	25.7	18.0	14.9

TABLE A5.1 CGIAR TOTAL INVESTMENTS, 1972-2000

(millions of current U.S. dollars and percentages)

	1972–76		19	77–81	198	32–86	198	7–91	199	92–96	1997	7—2000	T0	TAL
	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%	\$	%
Center														
CIAT	31	15%	75	12%	116	11%	158	11%	172	10%	127.0	9%	679	11%
CIFOR									26	2%	47.0	3%	73	1%
CIMMYT	42	21%	81	13%	118	12%	163	11%	153	9%	137.7	10%	694	11%
CIP	12	6%	37	6%	60	6%	100	7%	116	7%	89.3	7%	414	7%
ICARDA	1	0.5%	52	8%	101	10%	117	8%	111	7%	97.4	7%	479	8%
ICLARM									35	2%	41.7	3%	77	1%
ICRAF									78	5%	85.8	6%	164	3%
ICRISAT	20	10%	69	11%	117	11%	191	13%	159	10%	94.8	7%	651	10%
IFPRI			8	1%	28	3%	51	4%	69	4%	79.1	6%	235	4%
IITA	41	20%	92	15%	151	15%	178	12%	174	10%	124.1	9%	759	12%
ILRI	14	7%	84	14%	119	12%	167	12%	134	8%	107.4	8%	625	10%
IPGRI	1	0.5%	12	2%	21	2%	34	2%	82	5%	82.4	6%	232	4%
IRRI	40	20%	94	15%	138	14%	181	13%	207	12%	130.0	10%	789	13%
ISNAR			3	0.5%	22	2%	43	3%	54	3%	38.2	3%	160	3%
IWMI									46	3%	36.3	3%	82	1%
WARDA	2	1%	13	2%	29	3%	40	3%	47	3%	39.5	3%	171	3%
TOTAL	204	100%	617	100%	1,021	100%	1,422	100%	1,663	100%	1,358	100%	6,284	100%
Undertaking ¹														
Productivity	151	74%	433	70%	648	63%	893	63%	757	46%	496	37%	3,377	54%
Environment	13	6 %	56	9%	93	9 %	98	7%	245	15%	250	18%	755	12%
Biodiversity	1	0.5%	15	2%	33	3%	55	4%	140	8%	144	11%	388	6 %
Policy			7	1%	27	3%	38	3%	172	10%	172	13%	416	7%
NARS	40	19%	106	17%	220	22%	338	24%	349	21%	296	22%	1,348	21%
TOTAL	204	100%	617	100%	1,021	100%	1,422	100%	1,663	100%	1,358	100%	6,284	100%
Commodity sector ²														
Cereals	114	56 %	274	46%	465	49%	626	48%	601	42%	448	39%	2,528	45%
Rice	51	25%	126	21%	210	22%	269	21%	283	20%	207	18%	1,146	20%
Wheat	22	11%	65	11%	105	11%	127	10%	120	8%	92	8%	531	9 %
Maize	28	14%	51	9%	82	9 %	123	9 %	114	8%	80	7%	478	8%
Legumes	31	15%	111	19%	170	18%	221	17%	191	13%	161	14%	885	16%
Roots and tubers	29	14%	82	14%	128	13%	198	15%	229	16%	172	15%	839	15%
Bananas/plantains									61	4%	34	3%	95	2%
Production Sectors	174	86%	467	79%	763	80%	1,045	81%	1,082	75%	815	71%	4,346	77%
Livestock	29	14%	126	21%	187	20%	250	19%	222	15%	149	13%	964	17%
Trees									101	7%	138	12%	239	4%
Fish									35	2%	46	4%	81	1%
TOTAL	204	100%	594	100%	949	100%	1,295	100%	1,440	100%	1,148	100%	5,630	100%
Region														
Sub-Saharan Africa	86	42%	272	44%	449	44%	603	42%	656	39%	558	40%	2,623	42%
Asia	70	34%	178	29 %	285	28%	417	29 %	537	32%	433	31%	1,919	30%
Latin America and the Caribl		19%	96	16%	155	15%	221	16%	277	17%	232	17%	1,019	16%
West Asia and North Africa	9	4%	71	12%	134	13%	182	13%	192	12%	136	10%	723	12%
TOTAL	204	100%	617	100%	1,021	100%	1,423	100%	1,662	100%	1,358	100%	6,284	100%
Object														
Personnel	87	43%	312	51%	564	55%	778	55%	900	54%	676	50%	3,316	53%
Supplies/services	58	28%	183	30%	302	30%	423	30%	540	32%	509	37%	2,015	32%
Travel	11	5%	35	6%	70	7%	106	7%	110	7%	97	7%	429	7%
Capital/depreciation	48	24%	87	14%	85	8%	116	8%	112	7%	76	6%	524	8%
TOTAL	204	100%	617	100%	1,021	100%	1,423	100%	1,662	100%	1,358	100%	6,284	100%

Note: Non-agenda investments are assumed to be in the same proportions as agenda investments. Values include all overhead costs.

1 Certain assumptions were made to calculate values in environment and biodiversity undertakings from 1972 to 1991.

² The total for commodities is lower than in the other categories since not all Centers have commodity activity.

TABLE A5.2 CGIAR TOTAL EXPENDITURES AND SOURCES OF REVENUE, 1991–2000 (millions of U.S. dollars)

		1991			1992			1993			1994			1995			1996			1997			1998			1999			2000	
	1991	U	R	1992	U	R	1993	U	R	1994	U	R	1995	U	R	1996	U	R	1997	U	R	1998	U	R	1999	U	R	2000	U	R
CIAT	34.1	25.2	8.9	32.2	23.8	8.4	33.3	25.5	7.8	35.1	25.4	9.7	34.6	23.0	11.6	36.8	24.5	12.3	33.3	20.6	12.7	33.5	19.0	14.5	30.7	16.3	14.4	29.5	13.2	16.3
CIFOR							2.4	2.4		4.8	4.5	0.3	8.9	7.2	1.7	9.7	7.1	2.6	10.6	8.5	2.1	11.1	7.2	3.9	12.7	8.6	4.1	12.6	7.2	5.4
CIMMYT	34.4	23.5	10.9	33.7	24.9	8.8	32.8	23.8	9.0	29.0	20.7	8.3	27.1	16.9	10.2	30.2	18.2	12.0	30.4	19.4	11.0	32.2	18.8	13.4	37.4	18.7	18.7	39.0	15.5	23.5
CIP	23.6	17.7	5.9	21.7	14.7	7.0	21.5	13.1	8.4	22.4	13.5	8.9	24.0	13.4	10.6	26.1	12.9	13.2	25.5	15.1	10.4	21.7	13.1	8.6	21.6	12.9	8.7	20.2	10.6	9.6
ICARDA	22.0	18.1	3.9	20.6	16.3	4.3	21.2	17.2	4.0	22.7	16.0	6.7	23.4	16.1	7.3	23.2	12.1	11.1	27.6	16.0	11.6	23.6	12.2	11.4	22.8	11.8	11.0	23.4	10.6	12.8
ICLARM				6.1	1.3	4.8	7.2	3.1	4.1	6.5	2.7	3.8	7.1	3.6	3.5	8.6	4.0	4.6	8.5	5.1	3.4	10.4	6.6	3.8	12.4	7.2	5.2	10.4	5.1	5.3
ICRAF				13.1	5.5	7.6	13.8	6.0	7.8	16.7	5.2	11.5	16.8	7.3	9.5	17.4	7.4	10.0	22.2	9.1	13.1	21.1	9.5	11.6	21.8	8.9	12.9	20.7	7.3	13.4
ICRISAT	36.5	23.0	13.5	32.9	18.9	14.0	31.8	20.9	10.9	29.6	20.3	9.3	33.4	26.1	7.3	31.1	22.1	9.0	27.5	20.4	7.1	21.8	15.4	6.4	23.2	15.4	7.8	23.3	13.8	9.5
IFPRI	13.5	6.7	6.8	13.4	7.1	6.3	12.5	6.9	5.6	13.1	6.7	6.4	13.8	8.5	5.3	16.2	8.5	7.7	18.1	9.3	8.8	18.6	8.7	9.9	20.1	8.2	11.9	21.2	9.1	12.1
IITA	34.3	20.0	14.3	35.7	19.4	16.3	34.3	19.0	15.3	33.8	20.1	13.7	33.2	21.2	12.0	37.2	24.2	13.0	31.9	18.1	13.8	29.4	16.1	13.3	32.7	17.9	14.8	30.1	16.7	13.4
ILRI	35.0	28.9	6.1	32.9	28.4	4.5	26.0	22.4	3.6	23.9	18.9	5.0	25.7	21.7	4.0	25.9	21.0	4.9	26.7	20.9	5.8	27.7	21.5	6.3	26.5	14.8	11.7	26.5	16.2	10.3
IPGRI	8.1	7.2	0.9	12.3	10.8	1.5	13.6	10.3	3.3	16.3	8.5	7.8	19.6	12.9	6.7	20.0	12.1	7.9	19.6	12.6	7.0	21.7	13.9	7.9	20.4	12.6	7.8	21.5	10.7	10.8
IRRI	38.7	25.9	12.8	41.7	24.7	17.0	44.8	23.2	21.6	40.0	24.3	15.7	40.3	25.5	14.8	40.0	25.1	14.9	35.0	23.6	11.4	35.0	23.4	11.6	35.1	22.3	12.8	32.6	17.5	15.1
ISNAR	10.8	7.8	3.0	10.7	6.6	4.1	10.4	6.1	4.3	10.5	6.3	4.2	11.5	6.3	5.2	11.2	5.7	5.5	10.4	7.6	2.8	9.9	7.6	2.3	9.7	7.1	2.6	8.2	4.9	3.3
IWMI				9.1	3.0	6.1	8.9	3.1	5.8	8.8	4.4	4.4	9.4	3.6	5.8	10.2	4.9	5.3	10.1	5.3	4.8	9.2	4.8	4.4	8.8	6.0	2.8	8.9	5.4	3.5
WARDA	13.7	12.1	1.6	10.1	5.2	4.9	9.1	4.7	4.4	8.7	4.1	4.6	9.2	4.0	5.2	9.8	6.2	3.6	9.2	5.5	3.7	9.9	5.1	4.8	10.9	6.7	4.2	9.4	6.5	2.9
Total	305	216	89	326	211	116	323	208	116	322	202	120	338	217	121	354	216	138	347	217	130	337	203	134	347	195	151	338	171	167

 TABLE A6.1
 CGIAR PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL 1996 1997 1998	1999	2000
Center income (millions of U.S. dollars)		
Agenda funding 304 320 340	330	331
(of which percent unrestricted) 68% 64% 61%	54%	50%
Center earned income 14 13 13	11	14
Other income (non-agenda, and so on) 28 14 0	0	0
Advance/draw on reserves	2.42	5
Total 346 346 353	340	350
Membership agenda support (millions of U.S. dollars)		
Europe 112 141 148	126	128
Pacific Rim 43 40 44	48	44
North America 44 51 52	52	54
Developing countries 8 11 13	15	14
International and regional organizations 85 63 61	66	66
Foundations 6 6 7	6	7
Non-Members 5 7 12	15	19
Total 304 320 340	330	331
Top three contributors		
	rld Bank	World Bank
Japan United States United States	Japan	United States
United States Japan Japan Unite	d States	Japan
Staffing (number)		
Internationally recruited staff 897 862 893	907	873
Support staff 9,416 8,016 7,458	7,721	7,642
7,410 0,010 7,400	7,721	7,042
Agenda program expenditures (percent)		
Increasing productivity 40% 40% 37%	34%	36%
(of which germplasm enhancement/breeding) 18% 19% 18%	18%	18%
Protecting the environment 17% 17% 19%	20%	18%
Saving biodiversity 11% 11%	10%	10%
Improving policies 12% 11% 12%	13%	14%
Strengthening NARS 21% 21% (of which training) 8% 8%	23% <i>9</i> %	22% <i>9</i> %
(of which training) 8% 8% Total (millions of U.S. dollars) 326 333 337	347	338
iolal (illillions of 0.5. dollars)	547	330
Object expenditures (percent)		
Personnel 53% 51% 50%	50%	49%
Supplies/services 34% 36% 37%	38%	39%
Travel 7% 7% 7%	7%	7% 5%
Depreciation 6% 6%	5%	5%
Regional expenditures (percent)		
Sub-Saharan Africa (SSA) 39% 41% 41%	42%	42%
Asia 33% 30% 32%	32%	32%
Latin America and the Caribbean (LAC) 17% 17% 18%	17%	17%
West Asia and North Africa (WANA) 12% 12% 10%	9%	9%
Center financial information		
Unappropriated net assets 45.0 43.0 51.5	44.0	61.8
Appropriated net assets 277.0 272.8 271.4	219.2	141.1
Annual Center cost change (percent) 4.5% 2.6% 1.0%	0.2%	0.3%
Shout town limitity indicators		
Short-term liquidity indicators Working capital (days expenditure) 105 114 127	122	112
Working capital (days expenditure) 105 114 127 Current ratio 1.53 1.72 1.80	1.63	1.74
	1.00	1./ 4
1.00		
Longer-term sustainability indicator		
	13%	18%
Longer-term sustainability indicator Unappropriated net assets/revenue (percent) 13% 13% 15%	13%	18%
Longer-term sustainability indicator Unappropriated net assets/revenue (percent) 13% 13% 15% Fixed asset indicators		
Longer-term sustainability indicator Unappropriated net assets/revenue (percent) 13% 13% 15%	13% 17.9 100%	18% 14.9 93%

TABLE A6.2 CIAT PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000
Center income (millions of U.S. dol					
Agenda funding	31.1	31.7	32.1	28.7	29.2
(of which percent unrestricted)	66%	60%	55%	50%	1.0
Center earned income	2.1	1.6	0.9	0.6	1.0
Other income (non-agenda, and so on) Advance/draw on reserves					0.6
Total	33.2	33.3	33.0	29.3	30.7
ioidi	55.2	00.0	33.0	27.0	30.7
Membership agenda support (milli					
Europe	11.0	12.3	13.4	10.0	10.2
Pacific Rim	4.6	4.1	4.4	5.0	4.2
North America	5.0	4.5	4.6	4.6	4.4
Developing countries	2.0	2.6	2.6	2.7	2.3
International and regional organizations Foundations	6.8 1.1	6.0	4.4 1.2	4.4 0.5	5.4 0.7
Non-Members	0.6	1.1 1.1	1.5	1.4	2.0
Total	31.1	31.7	32.1	28.7	29.2
ioidi	31.1	51.7	32.1	20.7	27.2
Top three contributors					
V	/orld Bank	World Bank	Japan	Japan	Japan
	Japan	Japan	World Bank	World Bank	World Bank
Un	ited States	United States	United States	United States	United States
Staffing (number)					
Internationally recruited staff	76	60	64	62	58
Support staff	650	678	639	610	638
ouppoir sidii	050	0/0	007	010	000
Agenda program expenditures (pe	ercent)				
Increasing productivity	42%	44%	43%	41%	42%
(of which germplasm enhancement/breed	ling) 30%	30%	28%	27%	26%
Protecting the environment	16%	17%	21%	22%	23%
Saving biodiversity	17%	15%	13%	13%	15%
Improving policies	4%	4%	5%	7%	5%
Strengthening NARS	21%	19%	18%	17%	16%
(of which training)	6%	6%	5%	5%	5%
Total (millions of U.S. dollars)	36.9	33.3	33.5	30.7	29.6
Object expenditures (percent)					
Personnel	66%	60%	53%	52%	52%
Supplies/services	25%	28%	36%	36%	36%
Travel	5%	6%	7%	8%	7%
Depreciation	4%	5%	4%	5%	4%
•					
Regional expenditures (percent)					
Sub-Saharan Africa (SSA)	16%	23%	22%	23%	23%
Asia	12%	8%	8%	10%	12%
Latin America and the Caribbean (LAC)	71%	67%	68%	66%	63%
West Asia and North Africa (WANA)	1%	1%	2%	2%	2%
Center financial information					
Unappropriated net assets	0.7	4.1	4.2	2.8	2.1
Capital fund balance, Dec. 31	22.2	19.9	19.4	19.3	11.5
Annual Center cost change (percent))	4.7%	4.4%	(0.2%)	(2.9%)	(1.9%)
Ambar Cemer cost change (percent)	4.7 70	4.470	(0.270)	(2.770)	(1.770)
Short-term liquidity indicators					
Working capital (days expenditure)	33	52	40	19	<i>7</i> 1
Current ratio	1.2	1.5	1.5	1.2	1.6
Longer-term sustainability indicate	r				
Operating fund / revenue (percent)	2%	12%	13%	10%	7%
met and a construction of					
Fixed asset indicators	\ 1.0	0.4	2.0	0.7	1.0
Capital expenditure (millions of U.S. doll		2.4 131%	3.0 214%	2. <i>7</i> 183%	1.3 108%
Capital expenditure / depreciation (perce	7111J UU/0	131/0	Z14/0	103/0	100/6

TABLE A6.3 CIFOR PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000
Center income (millions of U.S. do	ollars)				
Agenda funding	8.7	10.6	11.3	11.5	12.2
(of which percent unrestricted)	82%	80%	65%	64%	55%
Center earned income	0.4	0.4	0.4	0.4	0.4
Other income (non-agenda, and so on)	0.3				
Advance/draw on reserves	2 4				0.3
Total	9.4	11.0	11.7	11.9	12.9
And the other control of the control of the		e delle es			
Membership agenda support (mil	4.4		6.1	4.7	6.2
Europe Pacific Rim	2.1	4.9 2.5	2.1	4.7 2.6	1.6
North America	1.0	1.6	1.0	1.1	1.0
Developing countries	0.6	0.6	0.2	0.2	0.3
International and regional organizations		1.1	1.5	2.0	2.2
Foundations	0.0	0.1	0.1	0.1	0.0
Non-Members		0.1	0.3	0.8	0.9
Total	8.7	10.6	11.3	11.5	12.2
Top three contributors					
	Japan	Japan	Japan	Japan	Japan
	n Commission	European Commission	European Commission	World Bank	World Bank
U	nited States	United States	World Bank	Netherlands	Netherlands
Staffing (number)	0.0	0.1	0.1	0.0	0.7
Internationally recruited staff	32	31	31	30	37
Support staff	78	64	74	86	118
Agenda program expenditures (p	orcontl				
	22%	25%	23%	24%	25%
Increasing productivity (of which germplasm enhancement/bree		0%	0%	0%	0%
Protecting the environment	34%	33%	35%	35%	30%
Saving biodiversity	16%	16%	13%	13%	13%
Improving policies	18%	20%	21%	21%	22%
Strengthening NARS	10%	6%	8%	6%	10%
(of which training)	2%	3%	2%	2%	2%
Total (millions of U.S. dollars)	9.4	10.6	10.6	12.7	12.6
,					
Object expenditures (percent)					
Personnel	44%	42%	42%	44%	46%
Supplies/services	46%	48%	47%	46%	44%
Travel	6%	6%	7%	6%	6%
Depreciation	4%	5%	5%	4%	5%
But the state of the second					
Regional expenditures (percent)	25%	27%	28%	29%	30%
Sub-Saharan Africa (SSA) Asia	46%	41%	39%	29% 37%	30%
Latin America and the Caribbean (LAC)		32%	33%	34%	34%
West Asia and North Africa (WANA)	0%	0%	0%	0%	0%
Trest / total and I total / titled (TT) titled	070	070	070	070	070
Center financial information					
Unappropriated net assets	4.5	4.6	5.3	4.5	4.7
Appropriated net assets	3.0	3.0	3.0	2.7	3.0
Annual Center cost change (percent)	2.8%	(1.2%)	(5.7%)	11.6%	2.0%
• "					
Short-term liquidity indicators					
Working capital (days expenditure)	249	199	210	147	160
Current ratio	2.7	2.7	2.5	1.9	2.2
Longer-term sustainability indicat		1001	1501	200/	070/
Operating fund/revenue (percent))	48%	42%	45%	38%	37%
Fixed asset indicators					
	llard 0.7	1.0	0.4	1.0	0.4
Capital expenditure (millions of U.S. dol Capital expenditure/depreciation (perce		1.2 240%	0.6 126%	1.0 200%	0.6 100%
Capital experiations/ depreciation (perce	2111/ 107/0	240/0	120/0	200/6	100/6

 TABLE A6.4
 CIMMYT PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000
Center income (millions of U.S. of Agenda funding	27.4	28.6 <i>62</i> %	30.1 <i>55</i> %	33.8 <i>45%</i>	37.5 <i>37</i> %
(of which percent unrestricted) Center earned income Other income (non-agenda, and so on)	66% 1.9 1.6	1.8	1.4	0.4	1.3
Advance/draw on reserves Total	30.9	30.4	31.5	34.2	0.4 39.2
Membership agenda support (m Europe	8.3	9.8	9.7	10.2	10.7
Pacific Rim North America	3.5 5.8	3.3 6.2	3.6 6.5	4.4 6.4	4.4 6.7
Developing countries International and regional organization Foundations	0.7 ns 8.3 0.7	1.6 6.3 0.8	1.6 6.7 1.1	1.8 6.7 0.8	2.1 7.1 1.2
Non-Members Total	0.2 27.4	0.6 28.6	1.0 30.1	3.5 33.8	5.2 37.5
Top three contributors	orld Bank	United States	United States	United States	United States
	ed States	World Bank European Commission	World Bank	World Bank Japan	World Bank Japan
Staffing (number) Internationally recruited staff Support staff	82 669	81 746	88 744	86 746	86 <i>7</i> 95
Agenda program expenditures Increasing productivity	34%	36%	36%	36%	37%
(of which germplasm enhancement/breed Protecting the environment Saving biodiversity	ing) 25% 27% 12%	29% 20% 13%	29% 19% 14%	29% 19% 14%	29% 19% 14%
Improving policies Strengthening NARS	4% 23%	4% 27%	4% 27%	4% 27%	4% 26%
(of which training) Total (millions of U.S. dollars)	<i>9</i> % 28.8	14% 30.4	14% 32.2	14% 36.1	14% 39.1
Object expenditures (percent) Personnel	50%	54%	52%	52%	52%
Supplies/services Travel Depreciation	36% 8% 6%	35% 7% 5%	37% 7% 4%	39% 5% 4%	39% 6% 4%
Regional expenditures (percent)	21%	32%	32%	36%	37%
Sub-Saharan Africa (SSA) Asia Latin America and the Caribbean (LAC West Asia and North Africa (WANA)	37%	32% 32% 26% 10%	32% 32% 26% 10%	30% 30% 24% 10%	28% 25% 10%
Center financial information					
Unappropriated net assets Appropriated net assets Annual Center cost change (percent)	8.5 13.8 8.6%	8.1 13.8 9.3%	7.4 14.0 1.0%	5.0 14.3 7.0%	4.8 14.3 6.4%
Short-term liquidity indicators Working capital (days expenditure) Current ratio	103 1.5	99 3.0	84 2.5	48 1.5	50 1.6
Longer-term sustainability indicated Operating fund/revenue (percent)	itor 27%	27%	23%	15%	13%
Fixed asset indicators Capital expenditure (millions of U.S. dolla Capital expenditure/depreciation (percent		1.1 79%	1.3 94%	1.3 93%	1.4 100%

TABLE A6.5 CIP PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000
Center income (millions of U.S. dol Agenda funding	22.7	22.6	22.2	20.0	19.9
(of which percent unrestricted)	56%	57%	61%	56%	52%
Center earned income	0.2	1.3	0.4	0.3	0.6
Other income (non-agenda, and so on)	1.5	0.8			
Advance/draw on reserves					0.6
Total	24.4	24.8	22.6	20.3	21.0
Membership agenda support (milli	ons of U.	S. dollars)			
Europe	14.0	14.4	13.9	10.4	10.41
Pacific Rim	2.0	1.5	1.8	2.1	1.86
North America	2.0	2.5	2.7	2.9	3.08
Developing countries	0.3	0.4	0.5	0.4	0.51
International and regional organizations	4.1	3.8	3.1	4.2	3.63
Foundations			0.2	0.1	0.08
Non-Members	0.3		0.0	0.1	0.32
Total	22.7	22.6	22.2	20.0	19.9
Top three contributors					
	vitzerland	Switzerland	Switzerland	Switzerland	Switzerland
European Co	mmission	World Bank	World Bank	World Bank	World Bank
·	Germany	United States	United States	United States	United States
	,				
Staffing (number)					
Internationally recruited staff	63	64	62	64	58
Support staff	576	519	477	607	529
11					
Agenda program expenditures (p	ercent)				
Increasing productivity	50%	43%	43%	40%	59%
(of which germplasm enhancement/breed	ling) 17%	25%	25%	24%	34%
Protecting the environment	15%	26%	26%	25%	0%
Saving biodiversity	15%	9%	9%	10%	15%
Improving policies	7%	5%	5%	7%	9%
Strengthening NARS	12%	17%	17%	17%	16%
(of which training)	7%	6%	6%	5%	0%
Total (millions of U.S. dollars)	24.6	24.7	21.7	22.7	20.2
iolal (illillions of o.o. dollars)	24.0	24.7	21.7	22.7	20.2
Object expenditures (percent)					
Personnel	47%	46%	48%	48%	44%
Supplies/services	41%	42%	42%	41%	48%
Travel	9%	9%	7%	8%	6%
Depreciation	3%	3%	3%	3%	2%
эф. ос. а о	0 70	0,70	• 70	• 70	-/-
Regional expenditures (percent)					
Sub-Saharan Africa (SSA)	16%	18%	18%	18%	18%
Asia	49%	51%	51%	51%	51%
Latin America and the Caribbean (LAC)	28%	26%	26%	26%	26%
West Asia and North Africa (WANA)	7%	5%	5%	5%	5%
,					
Center financial information					
Unappropriated net assets	1.1	1.1	1.5	0.2	3.1
Appropriated net assets	12.2	12.2	12.4	12.4	4.1
Annual Center cost change (percent)	3.9%	3.5%	1.7%	(0.4%)	2.5%
0 11 7				, ,	
Short-term liquidity indicators					
Working capital (days expenditure)	58	57	66	35	69
Current ratio	1.4	1.4	1.7	1.4	1.6
Longer-term sustainability indicato	r				
Operating fund/revenue (percent)	4%	4%	7%	1%	15%
Fixed asset indicators					
Capital expenditure (millions of U.S. dollars)	0.8	0.5	1.2	1.1	1.6
Capital expenditure/depreciation (percent)	114%	78%	188%	154%	320%

TABLE A6.6 ICARDA PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000
Center income (millions of U.S. dollar Agenda funding	21.1	22.0	25.2	19.5	22.1
(of which percent unrestricted)	55%	48%	55%	44%	42%
Center earned income Other income (non-agenda, and so on)	1.3 0.6	0.4	1.2	0.8	1.1
Advance/draw on reserves	0.0				0.5
Total	23.0	22.5	26.4	20.4	23.7
Membership agenda support (millio	ons of U	S. dollars)			
Europe	10.8	10.6	9.9	6.6	8.01
Pacific Rim	0.9	1.0	1.1	1.2	1.14
North America	1.7	2.1	2.2	2.1	2.07
Developing countries	1.3	1.8	2.5	2.8	2.39
International and regional organizations Foundations	6.1 0.1	5.2 0.1	8.1	5.5 0.1	7.21 0.08
Non-Members	0.2	1.4	1.4	1.3	1.22
Total	21.1	22.0	25.2	19.5	22.1
Ton three contributors					
Top three contributors	orld Bank	European Commission	World Bank	World Bank	World Bank
European Co		World Bank	European Commission	Arab Fund	Arab Fund
Ne	therlands	Germany	United States	United States	United States
Staffing (number)					
Internationally recruited staff	85	76	83	92	94
Support staff	395	390	323	330	330
Agenda program expenditures (pe	rcent) 43%	50%	47%	41%	41%
Increasing productivity (of which germplasm enhancement/breedin		24%	22%	21%	18%
Protecting the environment	16%	16%	20%	22%	22%
Saving biodiversity	10%	11%	13%	15%	17%
Improving policies	4%	5%	5%	5%	6%
Strengthening NARS	26%	19%	16%	17%	14%
(of which training) Total (millions of U.S. dollars)	<i>4</i> % 23.1	6% 27.6	<i>4</i> % 23.6	<i>5</i> % 22.7	3% 23.4
iolai (iiiiiiolis oi o.s. dollais)	20.1	27.0	23.0	22.7	25.4
Object expenditures (percent)	400/		0=0/	100/	
Personnel	40%	38%	37%	42%	38%
Supplies/services Travel	41% 9%	43% 10%	46% 9%	43% 10%	46% 11%
Depreciation	10%	9%	8%	5%	5%
·					
Regional expenditures (percent)	00/	00/	1.50/	1.50/	1.50/
Sub-Saharan Africa (SSA) Asia	0% 1%	0% 1%	15% 12%	15% 12%	15% 12%
Latin America and the Caribbean (LAC)	1%	1%	1%	3%	3%
West Asia and North Africa (WANA)	98%	98%	71%	70%	71%
Center financial information					
Unappropriated net assets	3.8	(0.8)	0.6	(1.2)	2.7
Appropriated net assets	30.2	30.4	30.6	12.0	8.6
Annual Center cost change (percent)	4.6%	2.6%	1.3%	1.1%	0.1%
electronic Problem College					
Short-term liquidity indicators Working capital (days expenditure)	154	107	159	147	151
Current ratio	1.7	1.9	1.8	1.7	2.0
Longer-term sustainability indicator	1 70/	1.40/1	20/	160/1	110/
Operating fund/revenue (percent)	17%	(4%)	2%	(6%)	11%
Fixed asset indicators					
Capital expenditure (millions of U.S. dollar		2.6	1.4	1.1	1.1
Capital expenditure/depreciation (percent)	122%	109%	70%	91%	92%

TABLE A6.7 ICLARM PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000
Center income (millions of U.S. do					
Agenda funding	9.5	8.8	10.6	14.2	12.0
(of which percent unrestricted)	62%		65%	63%	56%
Center earned income	0.4	0.2	0.3	0.2	0.5
Other income (non-agenda, and so on)	0.2				
Advance/draw on reserves					0.3
Total	10.1	9.0	10.9	14.4	12.8
Membership agenda support (mil					
Europe	4.3	4.40	5.4	5.2	4.43
Pacific Rim	0.8	0.79	1.0	1.4	1.52
North America	0.8	0.85	0.9	1.3	2.13
Developing countries	0.8	0.43	0.5	0.5	0.43
International and regional organizations	2.3	2.04	2.6	5.5	3.13
Foundations	0.3		0.3	0.0	0.09
Non-Members	0.2		0.1	0.4	0.27
Total	9.5	8.8	10.6	14.2	12.0
Top three contributors					
		European Commission		World Bank	World Bank
	Netherlands	World Bank	Denmark	European Commission	European Commission
	Denmark	Denmark	World Bank	United States	United States
Staffing (number)					
Internationally recruited staff	21	27	30	30	24
	207	179	261	291	225
Support staff	207	1/9	201	291	223
Agenda program expenditures (p	ercent)				
Increasing productivity	38%	36%	33%	26%	45%
(of which germplasm enhancement/bree		20%	19%	12%	10%
Protecting the environment	17%	17%	18%	38%	25%
Saving biodiversity	7%	16%	10%	1%	1%
Improving policies	16%	16%	19%	15%	13%
Strengthening NARS	22%		20%	19%	15%
(of which training)	1%		8%	7%	6%
Total (millions of U.S. dollars)	8.7	8.6	10.4	12.3	10.4
iolai (iiiiiiolis oi o.o. dollais)	0.7	0.0	10.4	12.0	10.4
Object expenditures (percent)					
Personnel	47%		50%	45%	44%
Supplies/services	42%	29%	37%	46%	47%
Travel	9%	9%	11%	7%	9%
Depreciation	2%	4%	2%	2%	0%
Regional expenditures (percent)					
Sub-Saharan Africa (SSA)	6%	30%	30%	30%	31%
Asia	89%		62%	58%	58%
Latin America and the Caribbean (LAC)	2%		3%	4%	4%
West Asia and North Africa (WANA)	3%		5% 5%	8%	8%
Trest / Gla and Fronti / And a (Tri Tri)	0 70	370	370	070	070
Center financial information					
Unappropriated net assets	0.7	1.6	1.5	1.9	4.1
Appropriated net assets	2.5	4.3	5.2	1.3	1.3
Annual Center cost change (percent)	4.1%	0.2%	(4.6%)	4.7%	(0.9%)
Chartenna liquidite indicatore					
Short-term liquidity indicators	50	104	88	74	170
Working capital (days expenditure) Current ratio					1 <i>7</i> 2 1.5
Current ratio	1.3	1.3	1.3	1.5	1.3
Longer-term sustainability indicate	or				
Operating fund/revenue (percent)	7%	17%	14%	13%	32%
Fixed asset indicators					2 -
Capital expenditure (millions of U.S. dol			1.2	0.0	0.2
Capital expenditure/depreciation (percei	nt) 250%	510%	479%	0%	513%

 TABLE A6.8
 ICRAF PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000
Center income (millions of U.S. dol	lars)				
Agenda funding	17.4	21.8	20.4	20.6	21.4
(of which percent unrestricted)	42%	40%	43%	38%	37%
Center earned income Other income (non-agenda, and so on)	0.7 0.7	0.4	0.9	0.7	0.8
Advance/draw on reserves	0.7				0.1
Total	18.8	22.2	21.3	21.3	22.4
Membership agenda support (milli			11 /	10.0	11.00
Europe Pacific Rim	8.5 1.1	11.5 1.0	11.6 1.2	10.3 1.3	11.33 1.26
North America	2.9	3.4	3.2	3.7	3.55
Developing countries	0.0	0.1	0.3	0.3	0.15
International and regional organizations	3.1	3.9	2.8	4.0	4.02
Foundations	1.3	1.1	1.0	0.6	0.49
Non-Members	0.5	0.6	0.4	0.5	0.6
Total	17.4	21.8	20.4	20.6	21.4
Top three contributors					
•	Canada	Canada	Canada	Canada	Canada
	Sweden	Denmark	World Bank	Sweden	Sweden
\	World Bank	World Bank	Netherlands	Netherlands	Netherlands
Staffing (number)					
Internationally recruited staff	53	50	56	52	47
Support staff	355	256	313	305	258
Agenda program expenditures (p	ercent) 48%	58%	40%	33%	29%
Increasing productivity (of which germplasm enhancement/breed		7%	40%	5%	5%
Protecting the environment	14%	12%	18%	23%	23%
Saving biodiversity	8%	7%	9%	4%	4%
Improving policies	11%	9%	11%	15%	17%
Strengthening NARS	19%	14%	22%	25%	28%
(of which training)	8%	9%	17%	17%	20%
Total (millions of U.S. dollars)	17.3	22.2	21.1	21.8	20.8
Object expenditures (percent)					
Personnel	61%	50%	58%	53%	54%
Supplies/services	28%	39%	26%	31%	31%
Travel	6%	5%	9%	11%	11%
Depreciation	5%	6%	7%	5%	5%
Regional expenditures (percent)					
Sub-Saharan Africa (SSA)	80%	76%	81%	79%	76%
Asia	12%	17%	12%	14%	17%
Latin America and the Caribbean (LAC)	9%	7% 0%	7% 0%	7% 0%	7%
West Asia and North Africa (WANA)	0%	0%	0%	0%	0%
Center financial information					
Unappropriated net assets	0.3	1.5	1.7	1.8	2.9
Appropriated net assets	6.0	8.4	8.5	8.3	8.5
Annual Center cost change (percent)	5.1%	4.1%	2.4%	(1.8%)	(0.9%)
Short-term liquidity indicators					
Working capital (days expenditure)	51	39	79	79	30
Current ratio	1.3	1.3	1.3	1.5	1.3
Lamana tama aratainakiita in ilian	_				
Longer-term sustainability indicato Operating fund/revenue (percent)	r 2%	7%	8%	8%	13%
Sharamid rangy revenue (hercern)	∠ /0	/ /0	0 /0	0 /0	13/0
Fixed asset indicators					
Capital expenditure (millions of U.S. dolla		1.3	1.9	0.8	0.4
Capital expenditure/depreciation (percen	t) 63%	101%	129%	72%	40%

TABLE A6.9 ICRISAT PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000
Center income (millions of U.S. d	ollars)				
Agenda funding	27.5	26.9	26.5	21.2	21.3
(of which percent unrestricted)	82%	76%	76%	63%	56%
Center earned income	0.7	0.9	1.2	1.4	1.7
Other income (non-agenda, and so on)	4.1	0.8			
Advance/draw on reserves					0.6
Total	32.3	28.6	27.7	22.6	23.5
Membership agenda support (mi	illions of U.S	i. dollars)			
Europe	11.0	9.4	9.5	7.5	8.11
Pacific Rim	4.7	3.7	3.9	4.3	3.39
North America	5.0	4.6	4.6	4.1	4.31
Developing countries	0.8	0.6	0.6	0.5	0.45
International and regional organizations	6.0	7.9	7.1	4.0	4.07
Foundations		0.0	0.1	0.1	0.27
Non-Members		0.6	0.7	0.6	0.67
Total	27.5	26.9	26.5	21.2	21.3
and the second second					
Top three contributors	A/l.l.D.	\A/ D	\A/	1	
\	World Bank	World Bank	World Bank	Japan	Japan
111	Japan nited States	United States	United States	United States	United States
UI	nitea States	Japan	Japan	World Bank	World Bank
Staffing /number					
Staffing (number) Internationally recruited staff	84	62	55	59	52
'					
Support staff	1,787	1,273	1,039	1,155	1,120
Agenda program expenditures (nercent)				
Increasing productivity	52%	54%	43%	41%	44%
(of which germplasm enhancement/bree		33%	25%	25%	27%
Protecting the environment	19%	12%	17%	17%	14%
Saving biodiversity	7%	7%	15%	13%	10%
Improving policies	7%	6%	4%	11%	15%
Strengthening NARS	16%	21%	20%	18%	18%
(of which training)	7%	8%	10%	10%	10%
Total (millions of U.S. dollars)	28.8	26.7	21.8	22.9	23.2
retail (ene et etet dellate)	20.0	20.7	2		20.2
Object expenditures (percent)					
Personnel	55%	56%	54%	54%	54%
Supplies/services	32%	30%	31%	35%	33%
Travel	5%	4%	3%	4%	7%
Depreciation	9%	10%	12%	7%	6%
Regional expenditures (percent)					
Sub-Saharan Africa (SSA)	49%	49%	50%	47%	50%
Asia	50%	50%	49%	49%	48%
Latin America and the Caribbean (LAC)		0%	1%	2%	1%
West Asia and North Africa (WANA)	1%	0%	1%	2%	1%
Center financial information					
Unappropriated net assets	0.6	(0.4)	5.4	4.4	7.2
Appropriated net assets	54.3	48.6	48.3	20.2	18.4
Annual Center cost change (percent)	2.4%	(0.4%)	1.1%	10.0%	(1.1%)
61 1: . 1: . 1: .					
Short-term liquidity indicators	101	1.50	010	007	000
Working capital (days expenditure)	101	152	313	291	290
Current ratio	1.6	2.1	3.3	2.7	3.5
Lamana tauna arratainahilita indiant					
Longer-term sustainability indicat	or 2%	100/1	20%	20%	31%
Operating fund/revenue (percent)	∠ /o	(2%)	20/0	20 /0	31/0
Fixed asset indicators					
Capital expenditure (millions of U.S. dol	llars) 4.4	1.1	0.5	1.2	1.6
Capital expenditure/depreciation (perce		39%	19%	75%	114%
Capital experiences depreciation (perce	, 17070	J / /0	1 / /0	7 3 70	114/0

TABLE A6.10 IFPRI PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000
Center income (millions of U.S. d Agenda funding	l <mark>ollars)</mark> 16.0	18.2	20.1	20.8	21.4
(of which percent unrestricted)	52%	52%	51%	43%	43%
Center earned income	0.3	0.2	0.3	0.5	0.9
Other income (non-agenda, and so on)					
Advance/draw on reserves					0.1
Total	20.4	18.4	20.4	21.4	22.3
Membership agenda support (n		· ·			
Europe	5.0	6.1	8.1	7.4	7.63
Pacific Rim	1.8	1.9	1.5	1.4	1.92
North America	3.8	5.1	5.6	5.1	3.7
Developing countries	0.1 ns 2.8	0.3 2.9	0.5 2.9	1.3 3.2	1.32 4.04
International and regional organization Foundations	0.9	0.7	0.4	0.5	0.56
Non-Members	1.5	1.2	1.1	2.0	2.22
Total	16.0	18.2	20.1	20.8	21.4
loidi	10.0	10.2	20.1	20.0	21.4
Top three contributors					
	Jnited States	United States	United States	United States	United States
	Japan	Denmark	Denmark	World Bank	World Bank
	World Bank	World Bank	World Bank	Denmark	Denmark
Staffing (number)	4.5		40		
Internationally recruited staff	41	45	43	44	52
Support staff	82	81	75	83	90
Agonda program ovnondituros	(moreont)				
Agenda program expenditures Increasing productivity	(percent) 0%	0%	0%	0%	0%
(of which germplasm enhancement/bre		0%	0%	0%	0%
Protecting the environment	0%	9%	6%	5%	10%
Saving biodiversity	0%	2%	2%	1%	0%
Improving policies	88%	62%	59%	55%	61%
Strengthening NARS	12%	27%	33%	39%	29%
(of which training)	6%	14%	11%	16%	15%
Total (millions of U.S. dollars)	16.2	18.1	18.6	21.2	21.3
Object expenditures (percent)					
Personnel	48%	48%	50%	50%	47%
Supplies/services	40%	43%	41%	41%	44%
Travel	10%	8%	8%	8%	7%
Depreciation	2%	1%	1%	1%	1%
Regional expenditures (percent)	1				
Sub-Saharan Africa (SSA)	43%	45%	46%	47%	50%
Asia	27%	26%	26%	25%	26%
Latin America and the Caribbean (LAC		19%	20%	20%	17%
West Asia and North Africa (WANA)	10%	10%	8%	8%	7%
Center financial information					
Unappropriated net assets	2.7	3.1	3.0	3.6	4.0
Appropriated net assets	0.7	0.6	0.7	0.7	3.8
Annual Center cost change (percent)	5.3%	3.1%	1.6%	2.2%	3.1%
Chart town limitality indicators					
Short-term liquidity indicators Working capital (days expenditure)	90	70	113	132	52
Current ratio	1.4	1.7	1.7	1.7	1.3
Corrolli Tallo		1.7	1.7	,	1.0
Longer-term sustainability indica	itor				
Operating fund/revenue (percent)	13%	17%	15%	17%	18%
Fixed asset indicators					
Capital expenditure (millions of U.S. do		0.2	0.4	0.2	0.2
Capital expenditure/depreciation (perc	ent) 100%	76%	199%	116%	67%

TABLE A6.11 IITA PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000	
Center income (millions of U.S. do	llars)					
Agenda funding	22.4	25.9	29.2	30.7	29.4	
(of which percent unrestricted)	81%	66%	55%	52%	54%	
Center earned income	1.0	1.5	0.8	1.7	0.9	
Other income (non-agenda, and so on)	9.2	4.1				
Advance/draw on reserves Total	32.6	31.5	30.0	32.4	30.3	
ioidi	32.0	31.3	30.0	32.4	30.3	
Membership agenda support (mill			11.	11.4	0.10	
Europe	9.5	10.8	11.6	11.4	8.13	
Pacific Rim	4.3	3.4	3.9	4.5	3.83	
North America	4.2 0.1	6.1 0.2	7.3 0.2	7.4 1.6	9.2 1.12	
Developing countries International and regional organizations	4.0	4.9	3.6	4.2	4.95	
Foundations	0.4	0.3	0.5	0.6	0.64	
Non-Members	0.0	0.3	2.0	1.0	1.53	
Total	22.4	25.9	29.2	30.7	29.4	
Top three contributors						
1.4	Japan /l-l Bl	United States	United States	United States	United States	
	orld Bank	World Bank	Japan	Japan	Japan	
Uni	ited States	Japan	World Bank	World Bank	World Bank	
Staffing (number)						
Internationally recruited staff	96	86	78	79	83	
Support staff	1,659	1,466	1,250	1,090	1,043	
Agenda program expenditures (pe		5.404	5.404	470/	500/	
Increasing productivity	51%	56%	56%	47%	50%	
(of which germplasm enhancement/breed		26%	27%	28%	26%	
Protecting the environment	18% 4%	1 <i>7</i> % 3%	17% 4%	14% 6%	15% 4%	
Saving biodiversity	4% 4%	3 % 4 %	4% 4%	6%	4% 9%	
Improving policies Strengthening NARS	23%	20%	19%	27%	23%	
(of which training)	4%	6%	6%	8%	5%	
Total (millions of U.S. dollars)	28.5	28.5	29.4	32.7	30.1	
iolai (illinoile el elei dellais)	20.0	20.0		02		
Object expenditures (percent)	===	500/	4=0/	100/		
Personnel	51%	50%	47%	48%	46%	
Supplies/services	30%	31%	36%	38%	40%	
Travel	5% 13%	6% 12%	6% 10%	5% 9%	6% 8%	
Depreciation	13/0	12/0	10%	7 /0	0 /0	
Regional expenditures (percent)						
Sub-Saharan Africa (SSA)	100%	100%	100%	100%	95%	
Asia	0%	0%	0%	0%	2%	
Latin America and the Caribbean (LAC)	0%	0%	0%	0%	2%	
West Asia and North Africa (WANA)	0%	0%	0%	0%	0%	
Center financial information						
Unappropriated net assets	5.4	5.5	6.2	6.0	6.2	
Appropriated net assets	35.3	35.5	35.7	35.7	13.1	
Annual Center cost change (percent)	8.6%	5.5%	4.2%	(14.5%)	(4.1%)	
Short-term liquidity indicators	117	0.5	101	105	1.47	
Working capital (days expenditure) Current ratio	1 <i>17</i> 1.5	95 1.5	131 1.6	125 1. <i>7</i>	1 <i>47</i> 1.9	
Correcti Tulio	1.5	1.3	1.0	1.7	1.9	
Longer-term sustainability indicato	r					
Operating fund/revenue (percent)	17%	18%	21%	19%	20%	
Placed manual to Program						
Fixed asset indicators Capital expenditure (millions of U.S. della	rrs) 2.0	2 1	2.0	2.2	1 0	
Capital expenditure (millions of U.S. dolla Capital expenditure/depreciation (percen	ırs) 2.9 t) 83%	3.1 91%	2.0 63%	2.3 76%	1.8 <i>75</i> %	
Capital expeliations/ depreciation (percent	1 00/0	7 1 /0	03/6	70/0	7 3 /0	

TABLE A6.12 ILRI PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000
Center income (millions of U.S.	dollars)				
Agenda funding	24.8	26.0	24.4	26.6	23.0
(of which percent unrestricted)	80%	75%	75%	56%	55%
Center earned income	1.2	1.0	1.4	1.5	1.8
Other income (non-agenda, and so or	1)				0.1
Advance/draw on reserves Total	26.0	27.0	25.8	28.0	0.1 24.9
iolai	20.0	27.0	23.0	20.0	24.7
Membership agenda support (n	nillions of U.S.	dollars)			
Europe	12.5	13.2	12.5	12.1	10.96
Pacific Rim	2.0	2.2	1.8	2.2	1.86
North America	3.6	4.3	4.5	4.3	4.17
Developing countries	0.0 ons 6.6	0.1 6.1	0.4 5.1	0.4 6.1	0.1 <i>7</i> 4.45
International and regional organization	ons 0.0 0.1	0.1	0.0	1.1	1.07
Non-Members	0.0	0.0	0.0	0.4	0.29
Total	24.8	26.0	24.4	26.6	23.0
Top three contributors					
	World Bank				
	United States Switzerland				
	Switzerland	Swirzeriana	Switzerland	Switzeriana	Switzerland
Staffing (number)					
Internationally recruited staff	79	61	76	76	67
Support staff	800	746	719	725	746
Agenda program expenditures		/ 00/	/ 10/	F 7 0/	470/
Increasing productivity	63% reeding) 2%	60% 2%	61% <i>3</i> %	57% 8%	47% <i>7</i> %
(of which germplasm enhancement/br Protecting the environment	5%	13%	12%	12%	23%
Saving biodiversity	9%	8%	9%	7%	5%
Improving policies	5%	5%	5%	9%	10%
Strengthening NARS	18%	14%	13%	15%	15%
(of which training)	3%	5%	4%	6%	6%
Total (millions of U.S. dollars)	26.0	26.7	27.7	26.5	26.5
Object expenditures (percent) Personnel	54%	54%	50%	48%	50%
Supplies / services	32%	34%	38%	38%	36%
Travel	4%	4%	4%	5%	6%
Depreciation	9%	8%	8%	8%	8%
•					
Regional expenditures (percent)		0.00/	4-704		. = 0.
Sub-Saharan Africa (SSA)	78%	80%	67%	67%	67%
Asia Latin America and the Caribbean (LA	.C) 8%	17% 3%	20% 11%	20% 11%	21% 10%
West Asia and North Africa (WANA)		0%	2%	2%	2%
Trost Field and From Filled (FFF ii V)	0,0	0,0	270	270	270
Center financial information					
Unappropriated net assets	7.0	6.2	3.9	5.4	4.4
Appropriated net assets	26.0	26.1	26.0	24.1	25.4
Annual Center cost change (percent)	2.3%	2.9%	2.9%	(1.5%)	0.4%
Short-term liquidity indicators					
Working capital (days expenditure)	158	151	126	156	148
Current ratio	2.6	2.3	1.9	2.0	2.4
Longer-term sustainability indic			. =0/		* **
Operating fund/revenue (percent)	27%	23%	15%	19%	18%
Fixed asset indicators					
Capital expenditure (millions of U.S. d	Iollars) 3.2	1.4	1.6	1.8	1.4
Capital expenditure/depreciation (per	cent) 139%	64%	73%	86%	70%
	-				

TABLE A6.13 IPGRI PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000			
Center income (millions of U.S. dollars)								
Agenda funding	16.4	18.8	21.2	20.1	22.3			
(of which percent unrestricted)	77%	67%	63%	61%	52%			
Center earned income	0.4	0.5	0.4	0.0	0.6			
Other income (non-agenda, and so on)	5.3	0.9			0.4			
Advance/draw on reserves	00.1	20.2	01.4	20.2	0.4			
Total	22.1	20.2	21.6	20.3	23.3			
Membership agenda support (milli	ons of U.S	6. dollars)						
Europe	10.3	11.3	12.3	10.4	11.8			
Pacific Rim	2.5	2.3	2.3	2.6	2.25			
North America	1.1	1.2	1.2	1.1	1.17			
Developing countries	0.2	0.4	0.3	0.4	0.83			
International and regional organizations	2.3	3.3	4.3	4.3	4.73			
Foundations		0.4	0.0	1.3	0.04 1.49			
Non-Members Total	16.4	18.8	1.0 21.2	20.1	22.3			
iolai	10.4	10.0	21.2	20.1	22.5			
Top three contributors								
	Japan	World Bank	World Bank	World Bank	World Bank			
	orld Bank		European Commission	Japan	Japan			
Sw	ritzerland	Japan	Belgium	Belgium	Belgium			
Staffing (number)								
Internationally recruited staff	41	41	43	46	46			
Support staff	86	109	108	112	143			
Agenda program expenditures (per		1.40/	1.40/	1.70/	1.70/			
Increasing productivity	14%	14%	16%	17%	17%			
(of which germplasm enhancement/breeding) Protecting the environment	ng) 14% 7%	12% 6%	13% 7%	13% 7%	13% 8%			
Saving biodiversity	45%	45%	39%	37%	37%			
Improving policies	13%	12%	13%	14%	13%			
Strengthening NARS	22%	23%	25%	26%	25%			
(of which training)	(4%)	6%	8%	8%	7%			
Total (millions of U.S. dollars)	16.5	18.6	21.7	20.6	21.5			
Object expenditures (percent)	48%	47%	43%	44%	1.10/			
Personnel Supplies/services	43%	45%	48%	46%	44% 47%			
Travel	8%	7%	7%	8%	7%			
Depreciation	1%	1%	2%	2%	2%			
•								
Regional expenditures (percent)	070/	070/	0.404	070/	0.00/			
Sub-Saharan Africa (SSA)	27% 27%	27% 27%	26% 26%	27% 27%	28% 27%			
Asia Latin America and the Caribbean (LAC)	27% 25%	23%	21%	27 %	27 %			
West Asia and North Africa (WANA)	20%	23%	27%	23%	22%			
, ,		_376	/0		==70			
Center financial information								
Unappropriated net assets	3.3	3.9	3.7	2.2	4.2			
Appropriated net assets	2.0	2.0	2.2	3.0	3.3			
Annual Center cost change (percent)	4.3%	0.9%	0.8%	(2.1%)	0.8%			
Short-term liquidity indicators								
Working capital (days expenditure)	89	81	96	100	122			
Current ratio	1.5	1.5	1.7	1.3	1.9			
Language and an ability in discovery	i							
Longer-term sustainability indicator Operating fund/revenue (percent)	15%	19%	17%	11%	18%			
Operating total/revenue (percent)	10/0	17/0	17 /0	11/0	10/0			
Fixed asset indicators								
Capital expenditure (millions of U.S. dollar		0.6	0.3	0.3	0.5			
Capital expenditure/depreciation (percent)	650%	240%	85%	75%	125%			

TABLE A6.14 IRRI PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000			
Center income (millions of U.S. dollars)								
Agenda funding	28.7	28.6	34.8	32.5	33.3			
(of which percent unrestricted)	87%	84%	67%	61%	55%			
Center earned income	2.7	1.8	3.2	1.4	1.6			
Other income (non-agenda, and so on)	17.9	6.8						
Advance/draw on reserves					0.5			
Total	49.3	37.2	38.0	33.9	35.4			
Membership agenda support (mil	lions of U.S	i. dollars)						
Europe	8.8	8.8	11.6	9.0	10.81			
Pacific Rim	9.2	9.1	10.7	11.4	10.47			
North America	3.7	4.2	4.7	4.7	4.81			
Developing countries	0.7	0.9	1.6	1.2	1.1			
International and regional organizations	5.9	5.2	4.8	5.1	4.9			
Foundations	0.5	0.5	0.9	1.1	1.03			
Non-Members	00.7	00.7	0.5	0.2	0.19			
Total	28.7	28.6	34.8	32.5	33.3			
Top three contributors								
	Japan	Japan	Japan	Japan	Japan			
	Vorld Bank	World Bank	United States	United States	United States			
Un	ited States	United States	World Bank	World Bank	World Bank			
Staffing (number)								
Internationally recruited staff	64	82	94	82	79			
Support staff	1,374	830	835	960	997			
Agenda program expenditures (pe		4.40/	0.00/	0.404	410/			
Increasing productivity	48%	44% 29%	39%	36%	41%			
(of which germplasm enhancement/breed	20%	29% 22%	<i>26%</i> 30%	22% 28%	30% 22%			
Protecting the environment	7%	8%	8%	9%	7%			
Saving biodiversity Improving policies	7 % 8%	7%	9%	11%	12%			
Strengthening NARS	17%	19%	15%	16%	19%			
(of which training)	4%	5%	4%	4%	8%			
Total (millions of U.S. dollars)	30.4	28.2	35.0	34.2	32.6			
,								
Object expenditures (percent)	59%	48%	47%	47%	140/			
Personnel Supplies/services	30%	38%	39%	39%	46% 39%			
Travel	5%	6%	7%	7%	8%			
Depreciation	7%	8%	8%	7 % 7%	7%			
2 00.00.00.00.00	, , ,	0,0	• 7.0	, ,,				
Regional expenditures (percent)								
Sub-Saharan Africa (SSA)	3%	4%	4%	4%	4%			
Asia	94%	92%	93%	92%	92%			
Latin America and the Caribbean (LAC) West Asia and North Africa (WANA)	3% 0%	3% 1%	3% 1%	3% 1%	3% 1%			
vvesi Asia ana Noriii Amca (vvANA)	0 /6	1 /0	1 /0	1 /0	1 /0			
Center financial information								
Unappropriated net assets	0.8	2.4	5.0	4.8	8.7			
Appropriated net assets	49.7	48.6	45.7	48.1	19.7			
Annual Center cost change (percent)	4.2%	(1.5%)	(7.7%)	5.5%	0.4%			
Short-term liquidity indicators								
Working capital (days expenditure)	180	237	249	253	130			
Current ratio	1.4	1.9	1.8	1.8	1.4			
Longor-torm sustainakilite indicate								
Longer-term sustainability indicate Operating fund/revenue (percent)	or 2%	7%	13%	14%	25%			
Specialing round/ revenue (berceill)	∠ /0	/ /0	13/0	14/0	25/0			
Fixed asset indicators								
Capital expenditure (millions of U.S. dolla		2.8	5.8	1.0	1.5			
Capital expenditure/depreciation (percen	nt) 73%	123%	223%	40%	68%			

 TABLE A6.15
 ISNAR PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000				
Center income (millions of U.S. o	Center income (millions of U.S. dollars)								
Agenda funding	10. <i>7</i>	9.9	9.6	8.2	8.5				
(of which percent unrestricted)	57%	72%	76%	69%	62%				
Center earned income	0.3	0.3	0.3	0.2	0.1				
Other income (non-agenda, and so on) 4.9								
Advance/draw on reserves					0.3				
Total	15.9	10.2	9.9	8.4	8.9				
Membership agenda support (r	millions of U.S	. dollars)							
Europe	5.1	5.6	5.1	4.4	3.95				
Pacific Rim	0.8	0.9	0.8	0.9	0.8				
North America	1.7	1.1	1.1	1.0	0.98				
Developing countries	0.1	0.2	0.3	0.3	0.14				
International and regional organization	ns 1.8	1.8	1.9	1.2	1.86				
Foundations	0.0	0.1	0.1	0.0	0.0				
Non-Members	1.3	0.2	0.4	0.4	0.76				
Total	10.7	9.9	9.6	8.2	8.5				
Top three contributors									
	Netherlands	Netherlands	World Bank	Netherlands	Netherlands				
	World Bank	World Bank	Netherlands	Switzerland	Switzerland				
	Switzerland		European Commission	World Bank	World Bank				
Staffing (number)									
Internationally recruited staff	38	53	46	45	32				
Support staff	53	35	38	40	35				
Agenda program expenditures		•••	•	00/	•				
Increasing productivity	0%	0%	0%	0%	0%				
(of which germplasm enhancement/br		0%	0%	0%	0%				
Protecting the environment	0%	0%	0%	0%	0%				
Saving biodiversity	0%	0%	0%	0%	0%				
Improving policies	26%	39%	48%	39%	15%				
Strengthening NARS	74%	61%	52%	61%	85%				
(of which training) Total (millions of U.S. dollars)	<i>15%</i> 11.3	18% 10.4	21% 9.9	20% 9.7	28% 8.2				
iolai (illillolis oi o.s. dollais)	11.5	10.4	7.7	7./	0.2				
Object expenditures (percent)									
Personnel	57%	57%	62%	60%	56%				
Supplies/services	28%	33%	29%	31%	32%				
Travel	14%	9%	8%	7%	10%				
Depreciation	2%	1%	1%	2%	2%				
Regional expenditures (percent)									
Sub-Saharan Africa (SSA)	54%	48%	34%	33%	38%				
Asia	12%	17%	15%	23%	27%				
Latin America and the Caribbean (LAC		25%	41%	29%	29%				
West Asia and North Africa (WANA)	11%	10%	10%	15%	6%				
Center financial information	0.0	1 ^	1.0	0.1	0.0				
Unappropriated net assets	2.0	1.8	1.3	0.1	0.9				
Appropriated net assets	0.8	0.8	0.8	0.8	0.8				
Annual Center cost change (percent)	(0.5%)	(5.7%)	1.2%	2.1%	0.0%				
Short-term liquidity indicators									
Working capital (days expenditure)	80	79	62	22	52				
Current ratio	1.9	1.9	1.5	1.1	1.4				
	_								
Longer-term sustainability indice	ator	1.00/	100/	10/	1.00/				
Operating fund/revenue (percent)	13%	18%	13%	1%	10%				
Fixed asset indicators									
Fixed asset indicators Capital expenditure (millions of U.S. d	ollars) 0.2	0.2	0.2	0.1	0.4				
Capital expenditure/depreciation (per		138%	200%	50%	200%				
capital experiations, depreciation (per	100/6	150%	200/6	30%	200/0				

TABLE A6.16 IWMI PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000
Center income (millions of U.S. do	ollars)				
Agenda funding	9.0	9.5	9.4	8.8	8.6
(of which percent unrestricted)	60%	54%	54%	68%	59%
Center earned income	0.2	0.3	0.2	0.2	0.4
Other income (non-agenda, and so on)	3.0	0.5			
Advance/draw on reserves	10.0	100	0.7	0.0	0.2
Total	12.2	10.2	9.6	9.0	9.2
Membership agenda support (mil			4.0	0.0	0.04
Europe	3.5	3.7	4.2	2.9	2.84
Pacific Rim	1.2	1.1	1.3	1.3	1.27
North America	0.9 0.1	1.5 0.4	1.2 0.3	0.9 0.2	1.05 0.35
Developing countries International and regional organizations		1.4	1.1	2.8	2.05
Foundations	0.7	0.7	0.8	0.4	0.18
Non-Members	0.4	0.7	0.5	0.4	0.10
Total	9.0	9.5	9.4	8.8	8.6
Top three contributors	Cormani	United States	lanan	Morld Danie	World Bank
h	Germany Netherlands	United States World Bank	Japan Netherlands	World Bank Japan	VVorid Bank Japan
	World Bank	Netherlands	United States	Sweden	Sweden
	VVOIIG BUIK	rveinerialias	Offiled Sidles	Sweden	Sweden
Staffing (number)					
Internationally recruited staff	22	22	22	25	26
Support staff	305	344	238	226	211
A manda muanum aynandibyyas (
Agenda program expenditures (percent) 1%	1%	1%	0%	0%
Increasing productivity		1%	1%	0%	0%
(of which germplasm enhancement/bree Protecting the environment	48%	48%	49%	42%	40%
Saving biodiversity	0%	0%	0%	0%	0%
Improving policies	24%	24%	24%	32%	35%
Strengthening NARS	27%	27%	27%	26%	25%
(of which training)	(11%)	0%	0%	0%	12%
Total (millions of U.S. dollars)	9.2	9.6	9.2	8.8	8.9
Object expenditures (percent)	64%	63%	67%	4 10/	400/
Personnel Supplies/services	22%	25%	20%	64% 20%	62% 21%
Travel	10%	8%	10%	12%	11%
Depreciation	4%	4%	4%	4%	6%
Doprocialion	470	470	470	470	373
Regional expenditures (percent)					
Sub-Saharan Africa (SSA)	11%	5%	5%	6%	8%
Asia	87%	76%	76%	75%	81%
Latin America and the Caribbean (LAC)	3%	14%	10%	10%	4%
West Asia and North Africa (WANA)	0%	5%	9%	9%	7%
Center financial information					
Unappropriated net assets	2.8	2.8	2.1	2.3	3.3
Appropriated net assets	3.1	3.3	3.2	3.2	2.7
Annual Center cost change (percent)	5.1%	2.0%	0.7%	0.1%	0.8%
Short-term liquidity indicators	1.40	140	107	205	170
Working capital (days expenditure)	140	168 3.1	187	205	172
Current ratio	2.5	3.1	2.8	2.1	2.9
Longer-term sustainability indicat	or				
Operating fund/revenue (percent)	23%	27%	22%	26%	36%
Phone discount to discount					
Fixed asset indicators Capital expenditure (millions of U.S. dol	lars) 0.7	0.6	0.3	0.3	0.3
Capital expenditure/depreciation (perce	ent) 175%	161%	74%	94%	60%
Capital experiations/ depreciation (perce	, 17 J/6	10170	/ 4/0	74/0	00%

TABLE A6.17 WARDA PROGRAM AND RESOURCE HIGHLIGHTS, 1996–2000

ACTUAL	1996	1997	1998	1999	2000		
Center income (millions of U.S. dollar Agenda funding (of which percent unrestricted) Center earned income Other income (non-agenda, and so on)	8.7 58% 0.5 1.6	8.6 <i>57%</i> 0.3	10.5 54% 0.1	10.8 61% 0.3	8.5 72% 0.3		
Advance/draw on reserves Total	10.8	8.9	10.6	11.1	8.8		
Membership agenda support (millions of U.S. dollars) Europe 3.9 3.9 3.4 3.5 2.7							
Pacific Rim North America Developing countries International and regional organizations Foundations Non-Members Total	1.6 1.4 0.4 1.4 0.1 0.0 8.7	1.5 1.5 0.2 1.4 0.1 8.6	2.5 1.2 0.9 1.6 0.2 0.8 10.5	2.1 1.1 0.1 3.1 0.2 0.8 10.8	1.76 1.14 0.1 1.84 0.18 0.78 8.5		
Top three contributors	Japan	Japan	Japan	World Bank	World Bank		
	orld Bank therlands	World Bank Netherlands	World Bank Canada	Japan Netherlands	Japan Netherlands		
Staffing (number) Internationally recruited staff Support staff	20 340	21 300	22 325	35 355	30 364		
Agenda program expenditures (per Increasing productivity (of which germplasm enhancement/breeding Protecting the environment Saving biodiversity Improving policies Strengthening NARS (of which training) Total (millions of U.S. dollars)	49%	32% 20% 25% 5% 11% 27% 7% 9.2	36% 23% 17% 7% 9% 30% 15% 9.9	37% 23% 18% 7% 9% 28% 14% 11.0	31% 16% 21% 5% 11% 32% 12% 9.4		
Object expenditures (percent) Personnel Supplies/services Travel Depreciation	50% 38% 5% 7%	50% 34% 9% 8%	57% 29% 7% 8%	53% 33% 6% 8%	46% 38% 5% 11%		
Regional expenditures (percent) Sub-Saharan Africa (SSA) Asia Latin America and the Caribbean (LAC) West Asia and North Africa (WANA)	100% 0% 0% 0%	100% 0% 0% 0%	100% 0% 0% 0%	100% 0% 0% 0%	100% 0% 0% 0%		
Center financial information Unappropriated net assets Appropriated net assets Annual Center cost change (percent)	0.8 12.8 19.2%	(0.5) 13.8 (1.7%)	(0.5) 15.0 2.6%	(0.1) 13.7 (0.1%)	(1.3) 2.5 (3.2%)		
Short-term liquidity indicators Working capital (days expenditure) Current ratio	28 1.0	3 1.0	(23) 1.1	(31) 0.9	(50) 0.8		
Longer-term sustainability indicator Operating fund/revenue (percent)	7%	(6%)	(5%)	(1%)	(15%)		
Fixed asset indicators Capital expenditure (millions of U.S. dollar Capital expenditure/depreciation (percent)		1.1 1 <i>57</i> %	0.6 75%	2.7 300%	0.7 70%		

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About the Cover

The cover attempts to depict the intricate link between the effects of climate change and the way in which modern science can be mobilized to negate adverse impacts on the well-being of poor farmers. The CGIAR is working with partners in the agricultural research community to advance science and develop new technologies that can better withstand biotic and abiotic stresses associated with climate change.

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